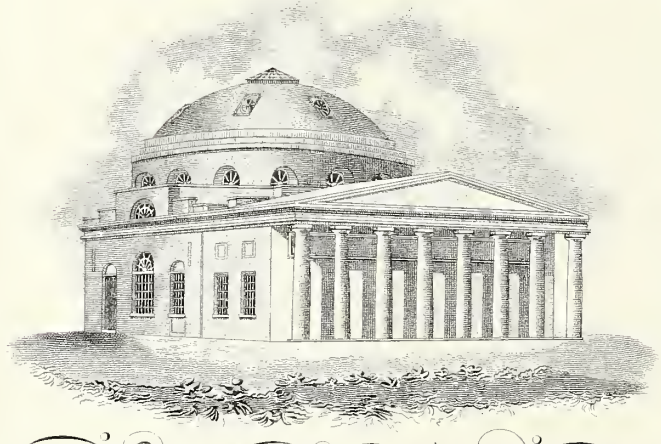
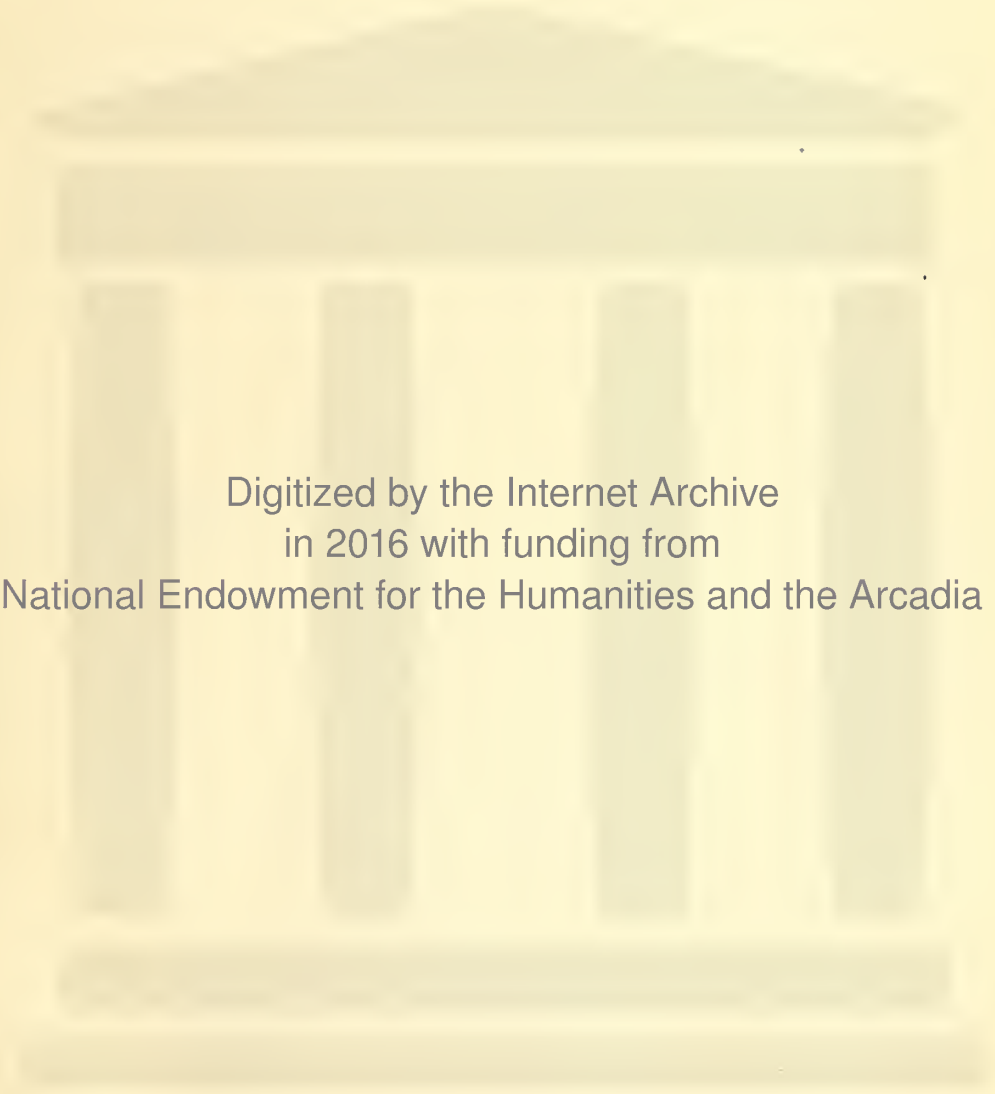
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The OHIO STATE MEDICAL JOURNAL

JANUARY, 1938
Vol. 34 Number 1



Supervising Formation of 1938 Annual Meeting Program
(See Page 75)

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The Ohio State Medical Journal

Vol. 34 JANUARY, 1938 No. 1

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CLINICAL OBSERVATIONS ON ANEMIA OF CHILDREN

By CLARE R. RITTERSHOFER, M.D., CINCINNATI, OHIO

IN the Children's Hospital in Cincinnati during the years 1935-1936, red cell counts and hemoglobin determinations were made on 2,521 patients ranging in age from birth to 17 years, and representing both ward and private patients. These data have been analyzed in an effort to determine, if possible, which types of anemia affected the children in the different age groups, which of them assumed importance by virtue of their greater incidence and which had escaped detection by the physician.

No attempt will be made to determine the processes which result in anemia nor to discuss the classifications of anemia except to emphasize that of all the anemias occurring in childhood, one group stands out so prominently that it deserves special mention. The group referred to is known among pediatricians as the nutritional anemia of infancy or sometimes termed milk anemia, but more exactly labelled iron deficiency anemia and characterized by microcytosis and hypochromia.

This anemia occurs rarely before six months of age, reaches its greatest incidence between six months and two years and is believed to be due to lack of storage of iron in the body. The deposits of iron which are present in the baby at birth are believed to be available for the formation of hemoglobin up to about the sixth month of life or during the period of most active growth. After the sixth month there is a gradual fall in the hemoglobin curve, signs of exhaustion of the iron stores appear and a hypochromic anemia develops. It has been shown that milk has a low iron content probably not more than a milligram per liter. Likewise, breast milk contains an insufficient quantity of iron. Infants whose diets have consisted largely of milk are particularly prone to develop this type of anemia although it may develop in those whose diets include cereals, vegetables, eggs and beef broth. Sometimes evidence of iron deficiency appears earlier due to lack of iron in the mother or to premature birth of the infant, or to twin pregnancy. On the other hand, cases that occur in later childhood, which are not associated with infection, are rare. In this series only one such older patient, an eleven year old girl, was found with such an uncomplicated type. The remaining cases in the older group were distributed among patients with tuberculosis, particularly tuberculosis of the spine

The Author

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Read before the Fourth Session, Ohio State Medical Association, 91st Annual Meeting, Dayton, Ohio, April 28 and 29, 1937.

From the Children's Hospital Research Foundation and the Department of Pediatrics, College of Medicine, University of Cincinanti.

and hip joint, and with those with rheumatic heart disease.

Of the data collected from these blood samples, only two items were considered necessary for determining the presence of an anemia. These were the total red cell count and the hemoglobin determination expressed in grams per 100 cc. of whole blood.

Hemoglobin values are expressed in grams per 100 cc. of whole blood, a terminology which is being used more and more to avoid the confusion surrounding the use of the misleading and erroneous expression "per cent of hemoglobin" found in most of the texts of today. It has been pointed out (1) that to express hemoglobin in per cent is no more logical than to report chemical determination such as urea nitrogen, or calcium, in terms of per cent of normal, particularly since the limits of normal variation for hemoglobin vary with the age of the child. All hemoglobin determinations in this group were made with the Sahli instrument. The normal range of hemoglobin values for children may be assumed to lie between 12 and 15 Gm. per 100 cc. of whole blood.

In the older terminology it has been customary to employ the term "color index" when one wished to indicate anemias of high, low or normal hemoglobin contents, using the figure 1 as normal. The objection to such a method is that the color index is obtained by comparing two determined values with two supposedly normal standards and expressing the quotient as an index. In these studies we have employed the term "mean hemoglobin per cell" as an exact way of expressing the amount of hemoglobin present in each cell. It is obtained by dividing the figure for grams of hemoglobin per liter of whole blood by that of the cell count in millions per cubic millimeter. The result is expressed in micromicrograms (million millionths of a gram), the average amount of hemoglobin that is found in each red cell. Because of the greater accuracy of this figure, it has been found to be of great value in picking out borderline cases of nutritional anemia. In children the normal range for this value usually lies between 27 and 32. In border-line cases of nutritional anemia this value drops below 25 and in severe cases below 20 and even 15 micromicrograms.

Before determining the presence of an anemia it is first necessary to establish the criteria by which these conditions are to be judged. For the purposes of this presentation I have selected data from all those blood samples in which the red cell count was less than 3.5 millions, the hemoglobin of the whole blood below 11 grams and the hemoglobin per cell less than 25 micromicrograms. It has been shown by Elvehjem, Peterson and Mendenhall[2] in a group of 740 children between birth and five years that 38 per cent of these at one year of age had hemoglobin values of less than 11 grams and approximately 10 per cent had less than 10 grams. Children with clinically recognizable anemia usually have hemoglobin values less than 10 grams and the clinically doubtful or border-line group may often have values between 10 and 11 grams.

Of the 173 patients in the present study having less than 3.5 million red cell count, 57 or 32.9 per cent were infants under six months of age and of these, 29 or 16.7 per cent were babies between two and three months of age.

It has been stated[3, 4] that congenital syphilis is found associated with anemia in babies under six months of age. In the group of 57 babies under six months of age, with red cell counts of less than 3.5 millions, eight were found to have syphilis and seven of these were under four months of age. In this group of 57 cases other conditions contributing to anemia were:

	No. of cases
Diseases of the respiratory tract and adnexa (Including pneumonia, empyema, otitis media, etc.)	16
Gastro-enteritis	10
Prematurity	3
Pyelitis	3
Anemia of the newborn	3
Pyloric stenosis	2

Conditions which were thought to play an etiologic role in the production of the 173 cases of anemia in all the age groups are shown in the order of frequency as follows:

	No. of cases
Infections (including diseases of the respiratory tract)	43
Post-tonsillectomy hemorrhage and trauma	14
Gastro-enteritis	12
Congenital lues	11
Leukemias	10
Rheumatic heart disease	9
Nephritis	8
Pyelitis	6

Of lesser frequency are:

	No. of cases
Hemolytic jaundice	3
Anemia of the newborn	3
Anemia of prematurity	3
Nutritional anemia	3
Purpura	3
Typhoid and paratyphoid fevers	3
Malaria	2

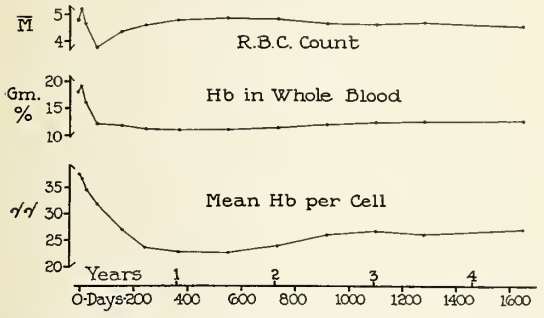
Several colored children showed the sickling phenomenon in their blood smears but only one had an anemia severe enough to fall in this group. Anemia due to scurvy and nephrosis occurred only once each.

In Chart 1 it will be observed that the values for the total red cell counts and hemoglobin decrease rapidly during the first six weeks after which the red count rises to normal at the end of one year. The hemoglobin falls more slowly until the tenth or twelfth week, after which a gradual rise takes place which continues until the

second year, when normal values have been reached. The hemoglobin per cell curve reaches its lowest point from six months to two years. The drop in the red cell count during the first three months may offer an explanation of the relatively large number of anemias that occurred in our series as it demonstrates that the "normal"

(CHART 1)

Averages of Data from 1070 Blood Samples



Curves showing the normal variations in the red cell counts, the hemoglobin values and hemoglobin per cell figures from birth to five years of age.

(Loaned through the courtesy of Dr. George M. Guest of Cincinnati and represents unpublished data on 1070 determinations.)

physiologic drop reaches its lowest point at this time, and many of the cases included in the series may represent exaggerated low normal figures. These curves also illustrate how hopeless it is to attempt to estimate hemoglobin in per cent when the normals vary so widely during this period. Josephs[5] believes that the drop in the hemoglobin level during the first two months of life is dependent upon intrinsic factors and is common to all infants, and that the extrinsic factors which affect the hemoglobin level do not come into play until after that time.

The data from the blood samples from the 2,521 patients are analyzed in Chart 2. In this chart the columns indicate the per cent of patients in the different age groups with hemoglobin per cell values below 25 micromicrograms and also in the black portion below 20. As will be seen from the chart, approximately 50 per cent of the children in the age group from six months to two years have values for the hemoglobin per cell under 25. This is the group that in my opinion should be classified as border-line nutritional anemia. In other words, one out of every two patients encountered in this hospital series in this age group from six months to two years showed evidence of the need of iron therapy. The more serious and hence the more obvious group with anemia is represented by the two columns 15 and 19 per cent respectively. In this group are the patients whose hemoglobin per cell value lies below 20. Compared with the other age groups, the period from six months to two years contains by far the greatest number of these patients. In the third year 22 per cent had hemoglobin per cell values less than 25 micromicrograms and in the older group the per cent of these patients dropped to approximately 10 per cent.

Clinically it is difficult to make the diagnosis of nutritional anemia unless the hemoglobin is below 8 Gm. or the hemoglobin per cell value is below 20 micromicrograms, in which case one is apt to note a peculiar ivory yellow or sheet white pallor of the skin, most marked in the ears and face. The color of the conjunctivae may aid but the color of the lips is definitely misleading. If the palms of the patients are inspected, their color should be compared with that of a normal individual. Crying or lying on the face or ears will often produce a transient hyperemia of the parts and prove misleading. The spleen may be enlarged in a certain number of the cases.

The blood picture is that of an anemia of the hypochromic microcytic type. The red cell count may be high, low or normal. The hemoglobin is reduced to a varying degree; in the severe cases to half its normal value. The less severe anemias show a fall in the hemoglobin with little or no diminution in the red cell count, while in the severe cases the hemoglobin values are still lower and a small drop in the red cell count occurs.

(CHART 2)

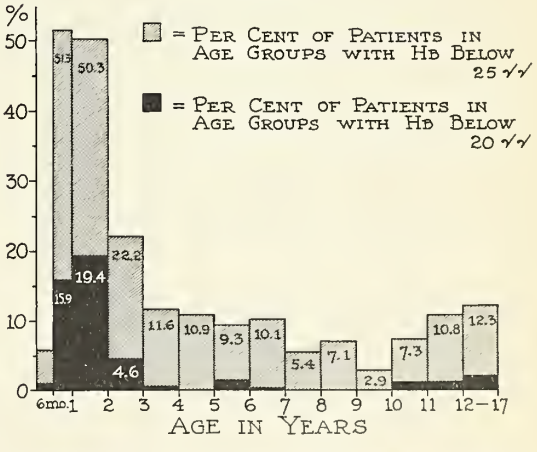


Chart showing the per cent of patients in age groups with hemoglobin per cell values below 25 and 20 micromicrograms, as shown by the shaded and solid columns respectively. In the six month to one year group the shaded column represents 116 out of 226 patients, or 51.3 per cent with Hb/cell values below 25 micromicrograms; the solid column 36 out of 226, or 15.9 per cent with Hb/cell below 20. In the one to two year group the shaded column represents 153 out of 304 patients, or 50.3 per cent with Hb/cell below 25 micromicrograms; the solid column 59 out of 304 or 19.4 per cent with Hb/cell below 20.

Occasionally, the red cell count is elevated and the hemoglobin only slightly reduced, in which case it is important to rely upon the figure for the mean hemoglobin per cell since this clearly points out the hemoglobin deficiency. As has been emphasized in these border-line cases it is re-

duced below 25 micromicrograms and in the clinically recognizable group below 20 and even 15. A central pallor of the red cells is seen on microscopic examination of the blood smear. In the severe cases an occasional nucleated red cell is found. Variation in size and shape is not unusual. The red cell appears to be small in size and this microcytosis is confirmed by the Price-Jones curves which demonstrate that the average diameters lie below the normal average. Other laboratory findings are a low volume index and a diminution in the mean cell volume. It is now believed that the decrease in the size of the cells precedes the reduction in the hemoglobin.

In Table No. 1 are shown data from typical samples of blood from patients with nutritional anemia. All of these patients are in the age group between six months and two years. The first case shows a normal red count, a low hemoglobin and a hemoglobin per cell figure in the lower levels. The second and third represent patients with high red counts, low hemoglobins and hemoglobin per cell figures which are markedly reduced. Case 4 illustrates a low red count, a correspondingly low hemoglobin and a hemoglobin per cell value slightly higher than the third. Cases 5 and 6 show high red counts, hemoglobins only slightly reduced and low hemoglobin per cell figures.

TABLE 1

Data on samples of blood from patients with nutritional anemia

Case	Age	Red blood cell count Millions	Gm. Hemoglobin in 100 cc. whole blood	Hemoglobin Per cell in Micro-micrograms
1	2 yr.	4.64	6.5	14.0
2	2 yr.	5.90	6.4	10.7
3	13 mo.	5.20	8.3	15.9
4	20 mo.	3.50	6.1	17.4
5	17 mo.	5.76	10.0	17.4
6	13 mo.	6.25	9.7	15.5

After iron therapy has been started the following changes occur in the blood: first, an increase in the number of reticulocytes, which reaches its maximum at the end of about a week and then with recovery slowly falls to normal; second, a fall in the total number of red cells if the count has been high, or a rise in the total if the count has been low; third, a slow rise of the hemoglobin of the whole blood to normal within a period of time varying from six weeks to six months. The mean hemoglobin per cell rises with the increase of the hemoglobin in the whole blood. The cells tend to become larger and more completely filled with hemoglobin as recovery occurs.

In the first case the red cell count was unusually high, the hemoglobin was low and the hemoglobin per cell extremely low. Treatment with saccharated ferrous carbonate was begun at 18 months of age. Six months later the red cell count was down to a normal value, the hemoglobin had increased to 14.5 Gm. and the hemoglobin per cell value was back to normal.

TABLE 2

Data on samples of blood taken before, during and after iron therapy.

Case	Rx	Age	Red blood cell count Millions	Gm. Hemoglobin in 100 cc. whole blood	Hemoglobin Per cell in Micro-micrograms
1.	Before	18 mo.	6.65	8.9	13.4
		20 mo.	5.03	12.1	24.0
	After	24 mo.	4.93	14.5	29.4
2.	Before	11 yr.	2.69	4.5	16.7
	After (5 wks. later)		4.70	12.2	26.0
3.	Before	18 mo.	3.87	6.5	16.8
	After (5 wks. later)		4.30	11.1	25.8

The second patient is an eleven year old girl, the only case encountered of the severe type of anemia in an older child uncomplicated by a severe infection. The red cell count and hemoglobin values were extremely low. After five weeks of treatment with iron and ammonium citrate, both the red count and the hemoglobin had returned to normal.

The third patient shows a moderate degree of anemia with prompt recovery after five weeks of therapy.

TREATMENT

It is likely that the majority of patients with nutritional anemia would recover spontaneously without any treatment but owing to the fact that during these periods they are particularly susceptible to infections such as upper respiratory infections, otitis media, gastro-enteritis, etc., it seems desirable to speed their recovery, if possible, and even better to forestall the development of such conditions in the beginning. Discussion of the treatment of nutritional anemia centers about the administration of iron. A number of preparations of iron may be effective in the treatment of nutritional anemia but in the anticipation of the necessity of the therapeutic use of iron it is desirable or feasible to give iron as a prophylactic measure. Recently it has been advocated that the early administration of iron as a prophylactic measure begin with the third and fourth months of life. The fact that over 50 per cent of our group in the six months to two year age period showed some signs of iron deficiency

appears to be a strong argument for its use as a preventive.

In some of the severer cases of nutritional anemia accompanied by infection, it is probably desirable to initiate the treatment by a transfusion in order to tide the patient over the critical period. Moreover in these severe cases the existence of infection may possibly be combated by the antibodies furnished in the donor's blood.

The effect of iron as a therapeutic agent probably depends on its ability to stimulate the production of red blood cells and to provide a material necessary for the formation of hemoglobin. Owing to the fact that iron, in order to be effective, must be in an available form, it is desirable when treating these patients to give an adequate supply of this mineral in an easily available form. It has been demonstrated that the iron in such foods as egg yolks, spinach, apricots, etc., is not nearly so effective in promoting recovery of iron deficiency anemias as inorganic iron in the form of the simple easily soluble salts, as ferrous salt and iron and ammonium citrate.

The value of hydrochloric acid as a means of increasing the efficiency of the iron preparation has not been decided.

The preparations which have been used in this clinic are the following: Iron and ammonium citrate 12 per cent solution. The dosage is 0.5 cc. per kilogram of body weight given either in orange juice well diluted with water, or the day's dosage is divided into several parts and given with each portion of milk. This latter method is probably preferable to administration in orange juice since it tends to minimize the astringent taste of the preparation. Saccharated ferrous carbonate, 6 to 10 grains daily in powder form or tablets may be given with the food or in the milk. Reduced iron may be given in doses of 5 grains three times daily, mixed with 2 or 3 times its weight of sugar. Ferrous sulphate in elixir form (Feosol) may be given in daily doses of 6 to 8 grains to the infant; in the older child 10 to 12 grains daily are usually the optimum. The desirability of adding copper sulphate is still a much debated question.

SUMMARY

In this group of hospital patients, nutritional anemia was found to a greater extent than other types of anemia of childhood. Determinations of the red cell count, hemoglobin content of the whole blood and hemoglobin per cell are sufficient to enable one to make a correct diagnosis and thus insure early treatment.

The occurrence of many "anemias" at two to three months of age suggests that these may represent low physiologic anemias of infancy. Of those cases of anemia with cell counts below 3.5 million, approximately 17 per cent were found in infants two to three months of age.

In the group of children having evidence of iron deficiency as shown by the low values for the mean hemoglobin content per cell, over 50 per cent were found in the age group from six months to two years.

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DISCUSSION

Lowell A. Erf, M.D., Cincinnati: Only commendation can be given a paper that reveals as much comprehension and correlation as the one which we have just had the pleasure of hearing. Dr. Rittershofer has stressed two important facts which are very useful to general practitioners. He emphasized that the "physiological anemia", which occurs between the first and third months, responds poorly to any known treatment, while the anemia which occurs between the sixth month and second year, is an iron deficiency anemia and does respond to iron therapy.

The subject of "anemia in childhood" is an extensive one, and is a subdivision of the subject of "anemia" in general. Unfortunately we do not know all of the active factors that cause normal erythropoiesis or red cell production, nor do we know the mechanism of erythrolysis or red cell destruction. We do know, of course, that red cell production is one of the functions of the bone marrow, and we have evidence to know that red cell destruction is one of the functions of the spleen and reticulo-endothelial system. Many of the peripheral blood changes, therefore, from a physiological standpoint, are essentially reflexions of either bone marrow changes or splenic and reticulo-endothelial changes. Disease or pathological processes, of course, have their influence on the factors causing red cell production and red cell destruction.

In an endeavor to understand anemias, therefore, the physiological function of the bone marrow, spleen and reticulo-endothelial system must be known. Such studies have been carried out in a very interesting and remarkable way under the direction of Dr. C. A. Doan, Dr. B. K. Wiseman, and Dr. George Curtis, at the Ohio State University, in the past five years.

Many methods for repeated studies on bone marrow have been introduced since Arinkin's original sternal puncture technique. The two techniques that we have used on both infants and adults to obtain bone marrow repeatedly, follows: A lumbar puncture needle, preferably the Quincke type shortened to 1½ inches, can be inserted into the midline of the sternum, just above the level of the third rib (between the second and third rib), through the outer plate. A sudden "give" indicates when penetration occurs. Only one drop, or 0.1 of one cu. cm. of marrow fluid is removed by aspiration with a two or ten cc. syringe after removal of the stylet. Occasionally, when

the sternal cavity is too small, which occasionally happens in infants, biopsies of the tibia and humerus can be avoided by the use of a Steinman pin, (the usual bone pin used by orthopedic surgeons). Such a pin has a sharp point, and if bent at right angles, can be easily grasped by the hand. This may be inserted through the skin without an incision, over the tibia or humerus of an infant, and rotated by hand until penetration of the cortex is accomplished. A needle is then inserted into the medullary canal and aspiration of the marrow fluid by a syringe from these bones is made possible.

Neither of these techniques are much more difficult than a spinal puncture, and can be done in the office or home. A bone marrow examination is diagnostically specific in some conditions, such as myeloma, Gaucher's disease, generalized xanthomatosis, leukemia, and hemolytic jaundice; and is helpful in ruling out or verifying other processes causing bone marrow disturbances.

Dr. N. Rosenthal and Dr. P. Vogel of New York City, who have made a thousand sternal marrow examinations, have recently shown that bone marrow differentiates in infants and adults are quite similar. This indicates that the bone marrow in early life is as mature relatively as other organs (liver or kidneys, etc.)

Recently, we had the opportunity of repeatedly studying the bone marrow of a baby delivered from his chronic myeloid leukemic mother. A sternal and tibial bone marrow aspiration was done immediately after birth, and a sternal puncture has been made every week since birth. The baby is now nine weeks old. The marrow findings in this infant always have been normal. There was a slight drop of normoblasts in proportion to the total nucleated cells during the "physiological anemia" stage in the first two months of life. However, the drop in normoblasts was not in proportion to the fall of the peripheral hemoglobin. This would be weak evidence for the verification of the opinion of MacKay and others who believe that the "physiological anemia" is a result of diminished red cell production.

The future studies on anemia probably will be made from the standpoint of numerous physiological observations of the bone marrow and spleen and the humoral agencies affecting the organs which are responsible for red cell production and destruction.

Diverticula become of clinical significance in about one-fifth of the cases because they become inflamed. The resulting diverticulitis may be acute or chronic. Since both a diverticulum and the appendix are sacculations, the symptoms of inflammation of either are similar. A salient differential diagnostic feature is that diverticulitis usually occurs in the sigmoid and therefore the symptoms are most frequently localized in the left lower quadrant. Also, as in appendicitis, the symptoms of diverticulitis vary from mild to very stormy. There may be merely discomfort; or there may be sharp pain, localized tenderness and muscular rigidity, fever, leucocytosis, nausea and vomiting.—Charles W. McClure, M.D., and John Zielinski, M.D., Boston, Mass.; R. I. Med. Jour., Vol. XX, No. 9; Sept., 1937.

The Harmful Effects of Ingestion of Large Quantities of Alkalies

The harmful effects of ingestion of large quantities of alkalies are many and varied. The clinical symptoms of alkalosis vary from such mild symptoms as anorexia, fatigue, vague pains especially in the epigastric region, polydipsia, and frequent urination; and as the condition increases in severity, nausea and vomiting appear with headache, dizziness, mental confusion, and convulsions. In the advanced stage of alkalosis are encountered pyrexia, rapid pulse, slow respiration, prostration deepening to coma, and finally death. Many patients with alkalosis have evidently been erroneously treated for acidosis.

Julius H. Hess states that alkalosis is a much more common clinical condition than has ordinarily been supposed. He points out that ketosis may develop in some cases of alkalosis on account of greatly diminished or absent urinary ammonia.

Bernard B. Badanes and Clara B. Parodneck warn the dental profession against the continued use of alkalies in the treatment of dental caries.

C. L. Cope emphasizes the danger of toxic effects resulting from the use of alkaline powders in the treatment of gastric ulcer or less well-defined gastric upsets. Such toxic effects may be caused by sodium bicarbonate or potassium citrate. There seems to be no definite amount which will cause the symptoms, and the length of time necessary for symptoms to develop is likewise a variable factor.

Julius Friedenwald and Samuel Morrison in a very comprehensive article on the use of gastric antacids among other facts mention untoward reaction from alkalies. They state that large doses of sodium bicarbonate have produced alkalosis with kidney injury and diminished excretion of nitrogen leading to uremia, and they advise the use of tribasic phosphates of calcium and magnesium instead of other alkalies as they do not produce systemic alkalinization.

The following quotation is from an editorial which appeared in the *Journal of the American Medical Association*, issue of June 27, 1931: "The prolonged use of any alkaline powders may be harmful and may lead to kidney changes. Alkalies should not be given indiscriminately without frequent examination of the urine. If kidney changes do become manifest, arterial changes would necessarily follow."

Injury to the kidneys following the prolonged use of alkalies has been suggested by L. L. Hardt and A. B. Rivers, and was subsequently described by Sara M. Jordan, E. H. Berger and M. W. Binger, and recently by J. M. Steele.—William J. Ezickson, M.D., Philadelphia; The Pa. Med. Jr., Vol. 41, No. 2; November, 1937.

THE MODERN CONCEPTION OF ECZEMA

By L. E. SEYLER, M.D., DAYTON, OHIO

THE adjective eczema is used to describe a weeping skin eruption but the diagnosis eczema is no longer used for all such conditions. The true eczemas are divided into two types,

(1) Atopic eczema, also called disseminated neurodermatitis, infantile eczema, eczema-asthma-hayfever complex, and exudative diathesis;

(2) Contact eczema, also called contact dermatitis, dermatitis venenata, occupational dermatitis.

ATOPIC ECZEMA

Atopic eczema may appear at any time during life, but is most frequent in infancy and childhood. The majority of cases seen after adolescence have persisted from childhood or have reoccurred. This condition is usually present on an allergic background.[1] In most cases a history of eczema, urticaria, asthma, allergic seasonal or perennial rhinitis, mucous colitis, or migraine in brothers, sisters, children or ancestors, can be obtained. In many cases one of the above named allergic conditions has already appeared in the patient. The disease affects any type of skin, but neurocirculatory instability is usually present.

Eczema of the atopic type first appears on cheeks of face, on the neck and flexures of arms and legs, especially in the anticubital fossae and in the popliteal spaces. It is usually symmetrical in appearance. The earliest change in the skin is an erythema due to hyperemia and soon followed by many small papules that vary in color from normal skin color to a fiery red. The papules later coalesce to form bright red erythematous areas accompanied very early by paroxysms of pruritus. In severe cases there is profuse oozing but never true vesciculation. In long standing cases the skin becomes normal to dark red in color and dry with a leathery lichenification. Often in infancy and occasionally in other cases there is a superimposed secondary infection usually due to staphloccoci. The lesions of this type of eczema are more frequently present in cold weather especially in the Fall and early Winter. They are affected by any emotional or metabolic disturbance that increases the cutaneous blood capillary field. The personality pattern is often average, but usually the patient with atopic eczema is egocentric, emotionally unstable and over-ambitious.[2] "In an attempt to hide his tremulousness the individual assumes a mask-like expression, 'poker face', through which the eyes glow like two coals that have burned holes in a blanket."[3]

Submitted April 15, 1937.

The Author

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The baby with infantile eczema has a very natural tendency to spontaneous remission at about two years of age and usually clears before school age. However in girls, especially it is apt to recur between the ages of 11 and 14. If the disease has not cleared entirely by the twentieth year, unless the patient has expert management, it usually persists throughout life with only relative short periods of freedom. The child no matter how young should be brought into allergic balance since unless the causative factors of the eczema are discovered and eliminated, the child later develops asthma in many instances.

In atopic eczema the skin response is a reaction due to sensitization to injested or inhaled substances present in the blood stream.[1] The majority of cases are due to foods or inhaled house dust, feathers, wool or other animal epidermals, silk, tobacco, etc. The reagins of the offending substance are in the blood stream. This may be proven by drawing blood from the patient with atopic eczema, separating the serum under sterile precautions and injecting 0.1 c.c. of the serum intradermally into the skin of a non-allergic individual. Forty-eight hours later the sites of injection on the body of the non-allergic are tested by cutaneous or intradermal methods with the substances to which the eczema patient gave skin reactions. These sites will produce similar wheals. Any other skin area on the body of the non-allergic will give entirely negative reactions.

CONTACT DERMATITIS

Contact eczema or contact dermatitis of which occupational dermatitis is only a sub-group develops at any time of life and is more frequent after age of 20. As the name implies, the irritation is caused by contact of the skin itself with the offending substance. Those products such as caustics that are irritating to everyone's skin are not classified among the causes of contact eczema. A dermatitis due to acquired skin sensitivity to a usually harmless substance may occur in anyone although it seems more frequent among those with an allergic background.

Because a large number of the causative agents are oils, oleoresins, resins and related compounds, because warm weather increases the activity of the sebacceous glands and because oils and oleoresins and related substances are more easily dissolved in the secretions of these glands contact eczema is more frequent in summer. Another reason is that many more growing plants are present during the summer months in the patient's environment.

The sensitivity is a cutaneous sensitivity.[4] If serum is taken from a patient suffering with contact eczema and injected into the skin of a non-allergic as described above, and intradermal and patch tests done on the prepared sites, no reactions will appear.

The eruption of eczema due to contact irritation, consists in the acute type of vesicles on an erythematous base and is usually first present on exposed parts of the body especially the hands and face, but also the outside of arms and legs. It may appear anywhere, however, as on the outside of thigh or on the chest anteriorly from matches carried in an overlying pocket. The more chronic forms consist of dry scaly erythematous areas with or without itching. The vesicular form is usually very pruritic. In the average case even in the acute stage there is not as much itching as in atopic eczema. As soon as the cause is removed the condition completely heals spontaneously. If the cause is not found, no form of treatment will long avail and the eruption may become generalized.

The most usual causes of contact eczema are:

(1) Plants, espeically such as Rhus Toxidendron and other members of the Rhus family,[5] Primrose,[6] Tomato Leaves.[7]

(2) Biological extracts such as turpentine, varnish, shellac, linseed oil, perfume.

(3) Soaps and cosmetics.

(4) Clothing, furs and dyes used on wearing apparel including shoes.

(5) Miscellaneous. This list is inexhaustible and has already reached in reported cases into the hundreds.[8]

METHODS OF TESTING

The cases of atopic eczema are tested by scratch and intradermal testing of all injested or inhaled substances as is done in hayfever and asthma. The materials used are dry powders or concentrated solutions of purified proteins for scratch testing and diluted dissolved purified protein products for intradermal testing.

The cases of contact eczema are tested by the patch test method. Either dried and powdered leaves moistened with water or crushed green leaves are used for the plants. In the case of liquids a small folded square of gauze is saturated with the liquid and applied to the skin. Solid materials in small pieces are applied after being moistened with water. The material must be diluted in every case to a concentration that will not irritate a normal skin under the same conditions. After the material has been placed on the skin, it is covered with a one inch square of cellophane and the cellophane is held fast by a two inch square of adhesive plaster. The arms, back and thighs are the best places for patch testing. When only a few tests are to be done, it is best to use normal skin as near as possible to the site of the eruption. In some cases positive tests are obtained only when the causative substance is applied as a test over the healed area of an eruption.[9] A positive test is a reproduction of vesicles, papules and erythema beneath the patch of test substance after 24 to 72 hours. It usually is present when the patch is removed but the site should be observed for another 72 hours.

TREATMENT OF ATOPIC ECZEMA

The factors giving positive skin reactions are removed entirely from the patient's diet and environment. When this cannot be done desensitization with gradually increasing concentrations of solutions of the offending inhalants subcutaneously will increase the patient's tolerance. Desensitization with foods has not proven practical. Although positive patch tests are not often obtained in atopic eczema it has been found worth while to remove feathers, silk and wool from the patient's environment,[10] the premise being that the already traumatized skin is further irritated by contact with these substances.

If the patient's skin is weeping, wet packs of Burow's solution N. F. VI diluted 1-20 or aluminum acetate solution 2 per cent diluted 1-10 are to be used. In the presence of secondary infection, potassium permanganate 1-5,000 solution should be substituted for the above. Between the wet packs which are used from two to four times a day for one-half hour, the skin is protected with the water soluable jellies such as K. Y. jelly. Until the acute condition subsides, no soap or water or ointment is to be used and the skin is to be cleansed with mineral or olive oil.

After the acute exacerbation has subsided and the skin is dry and leathery, mild stimulation with a tar will be helpful. There are many tars but they should be used only in dilute concentrations at first and in an ointment base made porus with powder. The following is an example:

R Naftalan	1.5
Menthol	.03
Burow's Sol. N. F. VI	7.5
Aquaphor	7.5
Zinc Paste q s a d	30.0

Sig. Apply at night and remove in morning with mineral oil. As condition improves, the naftalan may be increased up to four times above strength.

The following general measures have been suggested by Sulzberger and Goodman:

(1) General ultraviolet light well under erythema
(2) Arsenic internally
(3) Sedatives but not actylsalicylic acid
(4) Pilocarpine, ephedrine and amytal
(5) Autohemotherapy
(6) Calcium injections
(7) Strontium bromide injections
(8) Hyperpyrexia
(9) Dilute hydrochloric acid
(10) Non-specific vaccine
(11) Thyroid extract
(12) Hospitalization or entire change of environment.

CONCLUSIONS

In the modern conception of the diagnosis of eczema the term is used to describe only two distinct skin eruptions. (1) Atopic Eczema; (2) Contact Eczema.

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SUMMARY

	Atopic Eczema	Contact Eczema
Synonyms	Disseminated neurodermatitis Infantile eczema Eczema—asthma—hay fever— Diathetic eczema	Contact dermatitis Dermatitis venenata Occupational dermatitis
Family History	Allergic background	Not significant
Age of Onset	Usually before 20 years	Any age, but usually after 20 years
Character of Lesions	Coalesing red papules that may go on to weeping. Chronic stage, dry, leathery likenification of skin	Vesiculation on a superficially edematous, and erythematous skin
Distribution of Lesions	About eyes, mouth and neck; anticubital fossae, inside of wrists, popliteal spaces	About mouth, eyes and neck, hands, outside of arms and legs
Causative Factors	Injested food and inhaled fine particles from environment	Skin sensitivity on direct contact with a substance not irritating to the average person
Methods of Testing	Cutaneous scratch and intradermal	Patch tests
Blood Reagins	Present	Absent
Seasonal Variation	Worse in winter	More common in warm weather
Specific Treatment	Elimination diet Environmental control Hypodermic desensitization	Avoidance of contact with offending substance or substances Intramuscular desensitization with oil extracts
Local Treatment Acute exacerbation	Wet packs with astringents Burow's Sol. Diluted 1-20 K. M. n 0 4 1-5,000 Sol. Protective dressings of a Water soluable jelly	Wet packs K. M. n 0 4 1-5,000 Sol. anti puritic lotions with 1 per cent Phenol, 2 per cent resorcin, 8 per cent glycerine in weak alcohol and water sol.
Chronic Phase	Mildly stimulating tar ointments	A simple soothing ointment

TREATMENT OF CONTACT ECZEMA

The substances giving positive patch tests are to be absolutely avoided for several years. In the case of wild plants, some protection and aid in treatment is obtained by the intramuscular injection of gradually increasing doses of the purified plant oil diluted with almond oil.

When there is vesiculation and oozing the same astringents named above may be used. However, except on the face, 1-50 potassium permanganate wash is better than packs and gives quicker relief. This strength must not be used as a pack or soak. After the acute exacerbation has subsided a softening lotion containing glycerine is soothing. Then later a simple ointment such as the following may be used for the dry irritated skin:

	gm or cc.
Phenol	0.3
Resorcin	0.3
Rose Ointment	30.0

Sig. Apply to lesions twice a day for dryness.

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Have a Hobby: Acquire pursuits which absorb your interest; sports and "nature" are best.—Fetterman.

No matter how trivial the appearance of hoarseness may seem, its presence should never be ignored.

CONSIDERATIONS IN THE MANAGEMENT OF THE "NERVOUS WOMAN"

By ARTHUR J. TRONSTEIN, M.D., Newark, Ohio

VERY frequently women of all ages will present themselves for the physician's consideration with a number of vague aches, pains, and complaints whose nature is uncertain, and whose management is a source of embarrassment to the doctor. Many doctors will consider this type of patient as a nuisance, and either hand her a bag of pills (usually a sedative of the barbiturate type) or tell her not to waste her money since she is not really sick. Either procedure is wrong.

Nobody actually wants to see the doctor professionally. A patient comes to the doctor because he or she is ill. Whether the illness is due to some specific organic lesion or lesions, or whether it is due to psychic, or functional factors is up to the physician to decide. The patient complaining of pains and vague symptoms suffers from these regardless of their source. She seeks the doctor to get relief from her discomfort, and is entitled to as much study as the person with an acute appendicitis. Failure to give this care leads the sufferer to seek the quack, the cultist, or other competitor of the physician. It not only drives the patient from the physician's door, but leaves the patient with the feeling that nobody will be able to help him or her with any future ailments. This is especially true of the woman who has always had steadfast faith in her family doctor.

No condition can be treated properly unless the cause of the difficulty is found, or at least sought for diligently. The causes of the various symptoms which these women complain of are often obscure and may be from organic, functional, or psychic sources. There may be definite or indefinite combinations of these factors. It is up to the physician to seek them, explain them properly to his patient, and then attempt to rectify them to the best of his ability.

SYMPTOMS MOST COMMONLY SEEN

The most commonly expressed complaints of these "nervous" women are insomnia, fatigue, palpitation, constipation, dragging sensation in the abdomen, dyspnea, inability to concentrate, headache, muscle pains, joints pains, warm sensations, tingling of the toes or fingers, abdominal tenderness, frequency, and general loss of vitality.

Submitted November 13, 1937.

The Author

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The symptoms may be constant or appear at intervals. Any one or more of them may be the most noted, or there may be a generalized mixing of them in various degrees of severity. They may be noted by the patient only under certain conditions, or may be apparently unrelated to any set of circumstances.

FACTORS TO CONSIDER IN GENERAL

Certain general impressions and considerations will be very obvious to the doctor from the moment he sees his patient. He should, before starting deeply into the subject, make mental notes of them, and try to connect them with his patient's symptoms.

The patient's age is important. He should try to determine from this what general diseases are prevalent at this age. He should try to reason out from her age if she is old enough to have had one or more children, how long might he reasonably expect her to have been married, how long has she had to work for her living, how near to adolescence or menopause is she, does she seem older or younger than her age suggests, how well does she seem to have progressed physically for her years as far as her mental capacity shows, etc. It should be obvious that a woman in her forties is not likely to be as dyspneic as a woman seventy, etc.

All past illness should be carefully investigated. Not infrequently a case of scarlet fever has left the patient with a low-grade nephritis that didn't bother her particularly until some milder disease later has put a burden on the weak kidney, and aggravated the symptoms until the patient notes them for the first time. An old diphtheria, forgotten in childhood, may have left an ear defect not particularly noticeable until sometime later in life. There are an innumerable number of these factors to think of, and each warrants attention.

The marital state of a patient often has a direct bearing on the patient's condition. Consider the ages of the husband and wife. Consider how long the marriage has held. Try to determine if the

marriage is a happy one from the spiritual, sexual, and mental aspects. Consider how the husband treats the wife in public as compared to their private life. Consider any past divorces, separations, deaths, etc., as they have affected the life of the patient.

There are numerous general factors like these to consider, but space will not permit detailed discussion. However, bear in mind the social status, the economic factors, the religious background, the number of siblings (always remember that the "spoiled darling" only child wants to remain so as an adult), the education, the racial characteristics, the number of persons with whom the patient must live, and all other similar factors. Each may have some bearing on the case. Even the mere fact that the doctor has inquired into these questions often makes the patient respect him more, and get a great deal of satisfaction from this even though the doctor makes no comment upon their significance in the case.

MORE DETAILED AND ORGANIC FACTORS CONCERNED

Too frequently one hears a doctor say that the "physical examination was negative". What may be negative to one man, may be mere oversight to another. In these cases especially, small details are important since the very nature of the patient's complaints are nothing but a conglomeration of detailed symptoms.

After careful inquiry into the less detailed or less medical aspects of the patient's condition as noted before, a careful study of various systems should be made.

As noted before, past illness, operations, injuries, congenital defects, deformities, and habits should be carefully evaluated. Anything which can be corrected from these standpoints should be attended to as soon as possible, or at least explained to the patient with as much detail as the case warrants.

A complete gynecological and obstetrical history is important. When irregularities of the menses have been noted, investigate their cause well. The menstruations are big factors in the peace-of-mind of any woman. To her, and to the doctor, they tell important stories. Note carefully how many pregnancies, the time between them, the type of delivery, how long she was in bed after each, any miscarriages and their apparent causes, and suspect every woman who has had home deliveries of having a relaxed pelvic floor. The two go very much hand-in-hand, and their presence is often the explanation of many symptoms. No woman ever was entirely free from symptoms which disturbed her peace-of-mind if she had an old endometritis, a chronic leukorrhea, a frequency from a cystocele, or back-aches from a ptosis of her reproductive organs. A history of pregnancies with no repair work done should call these lesions to mind.

A history combined with proper tests for venereal diseases is important. Do not be fooled one way or the other by a woman's reputation. The whore may not have gonorrhea, and the rich widow may have gotten it from her philandering "dear departed". Many are the abdominal or cardiac signs of lues, and not all lues came from illicit intercourse. Do not be ashamed to take a Wassermann.

Consideration of menopausal symptoms has been mentioned before. Properly speaking one should consider them with the gynecological history, but they are worth individual discussion. The symptoms of the onset of menopause often appear before there is any change noted by the woman in her menstruations. Give her age, skin texture, nervous and temperamental stability, weight changes, reactions to intercourse, vaginal tissue turgor, and breast changes consideration. A little theelin will often help a lot even though one feels that this woman is not due to have her menopause for several years. There must be a reason why.

The endocrine system should be closely scrutinized. Inquire for a family history of goiter, disturbed menstruations, "fat people" families, people with big necks in the family, etc. Watch the patient's hands, eyes, cheeks, and neck for symptoms of goiter or related diseases. Too often the doctor thinks that unless there are all the symptoms of a goiter looking at him, none exists. There are minor degrees of toxicity from goiters that will disturb a patient and yet not be notable enough to attract much attention from the doctor. Do not feel that taking a basal metabolism rate tells the whole story. Not all elevated basal metabolism rates are from the thyroid. The pituitary, water metabolism, diet, etc., can vary it. One should remember also that not all goiters are palpable or visible in the neck. A deep intrathoracic goiter can exist. An X-ray is often better than a basal determination.

Malignancy is another matter to consider. How often we say, and how rarely we act upon our theory that cancers can exist many years with no apparent symptoms. Look at the cervix, the skin, the tongue, the breasts, the rectum, the eye-grounds, the lymph-nodes carefully. Every so often one will be surprised at his findings. These are simple things to investigate, and not infrequently are the tell-tale places from which the symptoms emanate.

In the search for causes for these symptoms, we must consider arthritis and neuritis. Both of these diseases may exist in low-grade form, and produce pain in various parts of the body. The symptoms are often made more acute by changes in weather, fatigue, over-exertion, trauma, and similar causes. A history of being "on a diet" for reduction, of vague abdominal pain, joint signs,

etc., should arouse suspicion. Try to make some impressions concerning the vitamin content of the woman's diet. One will be surprised how many persons will not be eating a balanced diet, and how often enriching the diet with necessary vitamin will aid the condition presenting itself.

Another rather common source of trouble is flat-foot. This common condition will lead to fatigue, sore feet, pain in the calves of the legs, low back-aches, swollen legs, stinging ankles, and many more remote symptoms. Look at the patient's shoes, particularly the heels and edges of the soles. Look also to see if the upper part of the "vamp" of the shoe cuts the dorsum of the foot. No woman can be happy with her "feet killing her" at the end of a day's shopping. While looking at the feet it is easy to search for varicose veins. They also are sources of trouble often unsuspected.

The symptoms of palpitation, dyspnea, fatigue, or fullness over the epigastric region should not be dismissed until thorough study is made of the cardiac system. A history of having had rheumatic fever, scarlet fever, or other acute infections will bear investigation. An electrocardiogram, a flat plate of the chest, a study of the blood pressure before and after exertion, and the giving of atropine in case of irregularities of the pulse are valuable diagnostic aids.

Numerous other things need investigation accurately, and will help the doctor if he is willing to take time. Checkup on the eyesight, the sinuses, the possibilities of tuberculosis, the urinary findings, the teeth, tonsils, the hemoglobin and blood cell findings, and any other similar thing which can be present without being definitely manifest.

All these things discussed have been organic. They require time and patience to do, but the patient will usually be glad to make more than one call (and pay for it too) if she is made to feel that you are really interested in her case. Such an examination will convince her that it is because you are, and she will cooperate well with the doctor. However, there are other factors less specific to deal with, and we will attempt to try to discuss these next.

NON-ORGANIC FACTORS ACTING TO CREATE SYMPTOMS

Today especially the economic factor is important. Worry over finances has created more symptoms than ever before. Certainly the doctor can not dig into his pocket, and pay the patient's bills. Nor can he change politics, etc. enough to make a noteworthy correction in present affairs. However, if he decides that the patient's financial worries are the biggest offenders as far as an individual case may go, he can be of definite value and service. The most part of these cases are due to not enough money. The doctor should acquaint himself with the Public Library. Here he will find budgets suitable to most pocketbooks, and if he can make his patient realize their value, he is serving her as well as if he had given her a bottle of medicine. He can thus point out to her how her money will best be apportioned. The library is also a good place to find out about less expensive foods, durability of cloths, use of remnants, utilization of fuel, etc. All of these facts will make her money go farther. The doctor can help his patient's mind and body by helping her family's pocketbook.

The problem of money is not necessarily one of too little money. Allowing a woman to have too much money to spend on fads, useless play, and for personal services allows her too much time to think about herself. Laziness bought with a fat bankroll breeds introspection and the desire for more attention. Occupational therapy is not outside the doctor's field. He should be able to give these women enough to do in the line of exercise, reading, attendance at lectures, adult education work, social service work, etc., to keep her busy enough that she doesn't have the time to brood over her petty aches and pains.

Sex and sexual life are as old a source of trouble as man himself. Sex life requires two people. It requires two persons whose opportunity, desire, temperament, and physical ability are identical at a given time. Many are the symptoms traceable to dissatisfaction between these two at any given time or times. Watch out for the wife who fears or dislikes coitus, but tolerates it for the sake of her "duty to her husband". Look for the wife whose husband is too old to give satisfaction. Look for the sterile matings. Look for the spinster who misses these things. Look for the pelvic condition that may make coitus painful. Certainly with modern science many of these conditions may be helped considerably. Often a confidential talk with the husband will help. Sometimes the fear of another pregnancy is behind it. A properly fitted diaphragm, properly applied, will allay a good deal of this fear, and so relieve those vague symptoms which seem to appear just before menstruation is due. Watch for the couple who seem anxious for children, but cannot have them. The doctor can induce them to adopt a baby, and they will get much pleasure from it. That will often cause vague symptoms based on frustration and suspicion to disappear.

The question of physical defects has been mentioned. It is surprising how a birth-mark, a scar, a mole, a habit, a limp, a lisp, or other things of this nature may change a person's outlook, and in turn, cause her to suffer from peculiar troubles. Many of these defects are not noticeable to any great degree to outsiders, but are immensely im-

portant to the woman. It requires no tremendous skill to correct a great many of these things. Scars, moles, small birth-marks, etc., very often are easily removed. Patient training will eliminate many bad habits. Again, occupational therapy may be the solution.

Many of these women come to the doctor because they are lonely, and find him a good listener. They, themselves, do not realize this. They are lonely; they want attention from somebody capable of giving it; the doctor is capable and available; they do not wish him to realize they have no ailments, so a series of symptoms are imagined for the moment; later these imaginary symptoms become impressed upon their minds; later they are so firmly impressed that the woman actually believes she has them, and so she seeks the doctor more than ever. The claim may have begun by feigning illness to get attention from neighbors, or a family, or to cover fatigue, but sooner or later they reach the doctor. Look for the widow, the dependent mother, the wife of the busy business man, the unattractive woman. The doctor can do that patient a great deal of good by tactfully getting her new friends. He can often introduce her to them through his own social life, through his business friends, through his affiliations with clubs or parent-teacher organizations, through social service agencies, etc. Give these women somebody to talk to, and watch what their symptoms do.

A great many other points might be made, but these cover the major portion. Most doctors can probably suggest others. However, action upon one point is better than mere discussion of many.

CONCLUSION

There are many cases of women whose complaints are so conflicting, so apparently non-organic, so trifling, so seemingly foolish to the doctor that he tends to look upon them as evils he must tolerate as part of his profession. This attitude has driven many patients from the physician to the quack. They really are important to both the physician and the patient, and merit careful attention by the former. Many of the seemingly non-organic sicknesses presented by these women, are in fact organic, and it is only because the physician is too lazy or too busy to give them the consideration they merit. These women are suffering, and regardless of the cause of their symptoms, the doctor rightfully is charged with seeking to allay their suffering. Many of the causes are not organic; but the doctor by means of his common-sense, intelligence, scientific training, acquaintanceship with public services, and honest desire to help, can do much to benefit the woman, and at the same time advance his economic status.

NEWARK TRUST BUILDING.

How Bad Is Obstetric Care?

In any evaluation of obstetric care, we cannot overlook a most important factor, the patient herself. Physicians do not entirely control any branch of medicine. They may advise or implore but whether or not the patient will follow the advice given is another matter. It is said that the responsibility for better obstetric care rests squarely upon the shoulders of the profession. Generally speaking this may be true but if so it is unique in the field of medicine. We do not hold the doctor entirely responsible for the mortality from other sources. In campaigns for decreased mortality from cancer, tuberculosis, heart disease, etc., the patient factor is certainly not overlooked. The present drive against cancer is most emphatically intended as a spur for an indolent public. I am not convinced that a large share of our present difficulty is not due to an almost unbelievable indifference on the part of both men and women toward childbearing, the many popular magazine articles to the contrary notwithstanding.

Examples of public indolence are everywhere apparent, i.e., the delay in seeking prenatal care, satisfaction with poor or no antenatal care, indifference toward advice given, the trifling attitude toward confinement on the part of the male particularly and the false sense of values as characterized by the importance attached to other lesser medical and surgical procedures. This trifling attitude on the part of the public does not minimize responsibility of the physician in any way. He is to blame for plenty and should assume that responsibility. All the same, we gain nothing by minimizing the part played by others. It is high time men and women are made clearly to understand that good obstetrics depends to a large degree upon cooperation. Let us continue to purge our practice of undesirable and harmful procedures but at the same time let us not continue to impress a small thinking public with only our own shortcomings. Let these thinking men and women learn of their responsibility and let them help prod the uninformed to a point where cooperation becomes universal.—Norman F. Miller, M.D., Ann Arbor, Mich.; The Jr. Mo. State Med. Assn., Vol. 34, No. 12, Dec., 1937.

A. M. A. Scientific Exhibit Blanks

Dr. Paul A. Davis, Akron, has been appointed representative to the Scientific Exhibit at the San Francisco session of the American Medical Association next June, by the Section on Preventive and Industrial Medicine and Public Health of the Scientific Assembly. Applications for space in the Scientific Exhibit may be obtained from Dr. Davis or from the American Medical Association, 535 North Dearborn St., Chicago, Ill.

SOME REMARKS ON LARYNGEAL DIAGNOSIS AND SURGERY

By HUGH GIBSON BEATTY, M.D., COLUMBUS, OHIO

THE larynx is commonly called "the organ of voice", but such a definition is misleading. The primary function of the larynx is connected with respiration and is protective, while the production of sound is a secondary function acquired in man and some other vertebrates. The truth of this statement is perhaps more obvious when we consider, even casually, the animal kingdom in general. Some animals have a well developed larynx but no voice. Others have a voice produced by some other organ of the body. "In a wide sense voice may be defined as the purposive production of sound for purposes of communication; a narrower but more generally accepted view limits the sound to one made by means of the pulmonary air tract."[1]

Even by the more restricted definition birds as a group are outstanding possessors of voice, but the voice of a bird is produced not by the larynx but by the syrinx, a special organ which apparently has no other function but that of phonation. The wider definition, "the production of sound for purposes of communication", is exemplified in various ways by different animals. The rattlesnake can communicate very successfully by vibrating his tail, the huffed grouse by drumming with his wings against his own body or a fallen tree. One of the most effective sounds produced by any animal for purposes of communication is that made by the bill of the flicker on an iron roof; but we do not think of such sound production as being the primary function of the flicker's bill.

THE PRIMARY FUNCTION OF THE LARYNX

In its primitive form the larynx may be described as a valve to prevent the entrance of anything except air to the pulmonary tract. In the course of evolution modifications connected with the taking on of secondary functions have brought about increased complexity of structure, but its primary function as a protective valve has never been lost.

The beginning of life is hidden in the remote geologic past. But of one fact we are certain: Through millions of years, during the evolution from the simplest forms to those of greater and greater complexity, the immediate environment of all animal life was water. In the simple unicellular forms oxygen could be absorbed from the water through the entire external surface of the organism. With increase in size and complexity the needs of the animal increased, and it is obvious that as bulk increases surface area does not increase proportionately. This increase in size must therefore be self-limiting unless the need for a more rapid intake of oxygen can be met. The gill system which developed in certain rather highly specialized forms, more notably in fish, may be described as a device for greatly increasing surface area with a very slight corresponding increase in bulk, thus permiting oxygen to be taken from the water much more rapidly. With this advantage fish became large and numerous, the dominant animals of Devonian time,—as is witnessed, for example, by the abundance of their remains in some of the limestone quarries of central Ohio.

But there seems to be no backward path in specialization, and the very specialization that gives an organism an advantage in one environment makes adaptation to a changed environment more difficult. Gills were a distinct advantage to an animal living in water, but even at the time fish were developing in such abundance and diversity there had begun a change in climate that put a premium on a new type of adaptation. A period of increasing aridity had set in and this in time brought about a marked diminution of terrestrial waters. Most of these Devonian fish were inhabitants not of the sea but of fresh water, and so more liable to be adversely affected by such a change. A decrease of the volume of water in a sea may not seriously affect the amount of oxygen available, for the movements of tides and waves continue to aerate the water. But fresh waters are more limited in area and likely to have less motion, especially as a climate becomes drier. Not only do the waters dwindle, but as they grow more stagnant the supply of oxygen becomes less and less. A semi-arid climate is characterized by great variations in volume of fresh waters—periods of flood and drouth. During flood periods gills functioned efficiently. In

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Read before the Section on Eye, Ear, Nose and Throat, Ohio State Medical Association, Ninety-first Annual Meeting, Dayton, Ohio, April 28-29, 1937.

1. Negus, V. E., The Mechanism of the Larynx. p. 271. The C. V. Mosby Company, St. Louis, 1929.

pools of stagnant water they were inefficient. Aestivation during times of drouth, development of some mechanism for breathing air, or extinction, were the alternatives. Many of these ancient fish combined the first two. In these "an organ was developed in which air could be brought into close relation with blood flowing through capillaries, and this organ took the form of a lung.

"The lung was produced by a downgrowth or evagination of the floor of the ventral region of the fore-gut. By gradual extension, a saccular outgrowth came into existence, lined with epithelial cells specifically modified to carry on an exchange of oxygen and CO_2 and supplied with a close network of capillaries. . . .

"When a pulmonary outgrowth, developed in this manner, grew to a considerable size, it became possible for the respiratory exchange carried on through its walls to enable a fish to survive for long periods out of water, provided its activities were slight during this period. But as the epithelium became so specialized that it could extract oxygen from the air, so it had no power of absorbing oxygen from the water. Therefore it became imperative that only air, and not water or other harmful substances, should enter it.

"With this object in view, a valve was evolved to guard the entrance of the pulmonary outgrowth; this valve had the power of opening and shutting, and lay in the floor of the pharynx. In such a way a larynx—as the valve is called—came into existence. The larynx is a valve to protect the entrance to the pulmonary air-way, and it is incorrect and misleading to speak of it as the organ of voice; it has, in the course of evolution, acquired other functions, but its primary one is to ensure that nothing except air shall enter the pulmonary outgrowth."[2]

In the lung-fishes the development of this primitive lung with its protecting valve might be called an emergency measure to carry the organism through a time of special stress during which its normal activities were much restricted. As the climate became still drier and the times of drought still longer, these periods of torpor came to bear too great a ratio to the life span of the creature. Most of these fishes disappeared from the face of the earth, though a few have persisted in semi-arid regions to the present time—"living fossils"—such as the long-fish of Australia.

The next higher great group of vertebrates, the Amphibians, were developing as the lung-fish were declining, and it was they who "took the most dramatic step in the history of evolution", the emergence from water to land. These early Amphibians had a dual breathing system of gills and lungs, and during their active adult stage air-breathing was their normal mode of life. They were the first of the vertebrates to emerge "from the limiting waters to the limitless air", and in the new and more difficult environment evolution was accelerated. Their respiratory system, including the larynx, was still comparatively simple, but already there was beginning the long series of modifications that have brought about the complexity of the larynx as we know it in man and the higher mammals.

In its function as a protective organ, the preventing of the entrance of foreign substances, the larynx is aided by the action of the epiglottis, the base of the tongue and the ary-epiglottic folds. The rima glottidis is closed by the action of the arytenoids and false and true cords. The integrity of the superior laryngeal nerve is of the utmost importance in precipitating the involuntary action of expelling the intruder, and the secondary action of the recurrent nerve in closing the larynx to further entrance. Incidents of death from the entrance of food are not uncommon in institutions, in patients who suffer from lesions causing paralysis of these nerves.

RESISTANCE

If we attempt to explain the absence of laryngeal disease in some individuals and its presence in others, we are left in a fog. We do not refer in this part of the discussion to malignancy, lues or neurologic involvement. The larynx ordinarily has a remarkable resistance to serious involvement in the presence of upper and lower respiratory disease. This we know well, and we also know that at times it tolerates, without permanent injury, an extreme degree of abuse, even in the presence of chronic pulmonary disease or irritation from above. Some of the various factors which contribute to the protection of the laryngeal mucosa and submucosa are well known. In certain instances, however, we observe an intact mucous membrane in the presence of such severely infected and irritated environs that we are certain we do not quite understand all of the protective factors.

The larynx is so placed that so long as any causes of irritation are present they can not possibly be avoided. Also the larynx is never at rest. Vocal rest may be secured in some patients, but respiratory movements, coughing, swallowing, and other reflex actions can not be controlled.

We urge the correction of nasal obstruction, sinus disease, oral or pharyngeal infection, for well known and generally accepted reasons. Such correction may be urged also when the tracheobronchial tree shows the effect of contamination from above. But how frequently is such advice given as a protective measure to an intact laryngeal mucosa? Not nearly as often as it should be. Nasal obstruction and chronic oral or sinus infection are constant threats to the larynx of

(2) Ibid., pp. 3, 7.

the singer or orator. It is indeed fortunate that the larynx can "shift for itself" so well, and has the remarkable resistance to irritation and abuse —often both together—that it has.

We know well the great difficulty of correcting chronic laryngeal changes, once they are established, and that such corrective measures cannot be successful until the source of irritation has been removed. Formerly many kinds of "laryngeal treatments" were exploited, and such treatments were regularly applied to the inflamed and irritated larynx in the presence of an existing and active source of irritation. Obviously these measures, many of them, not only succeeded in adding a load to the already over-taxed larynx, but actually increased the irritation. Not much better are some of the modern methods of treatment suggested by ambitious salesmen of apparatus and remedies,—who, by the way, are not always themselves to be blamed for their erroneous ideas. Such treatments in some instances may not actually do harm, but they do delay the program of accurate diagnosis.

The "necessity for the early recognition of laryngeal lesions", of which hoarseness is often the chief symptom, is so generally recognized by the medical profession that it may almost be called axiomatic. Of even more importance, however, is the necessity for early appreciation and recognition of an anatomical or pathological danger to the larynx, whether this danger be actual or potential. Many of the laity are today recognizing the significance of continued laryngeal irritation or hoarseness. Many others, however, do not understand the significance of such symptoms, and it is these who present the well established disease. In the medical profession it is not the general practitioner alone who is to be blamed for delay in seeking or securing an accurate diagnosis, as we see instances of this same procrastination among members of our own group of specialists.

PROCEDURES IN DIAGNOSING

Not until comparatively recently have the majority of ear, nose and throat specialists given the larynx proper observation and, in many instances, made correct diagnoses.

With the present perfection of technique and methods of diagnosis, together with modern instruments with which to work, the laryngologist today should have little trouble.

The improvement in methods and instruments used in performing direct laryngoscopy and bronchoscopy has been one of the greatest aids in diagnosis, and has, by familiarizing the operator with the tract, removed hesitancy and the fear of doing something unusual in a given patient. This has also demonstrated the facts that there are certain areas in every larynx that can not be viewed by the laryngeal mirror, and that in certain other patients a complete view can be had only by direct examination. This is a very important point to keep in mind in laryngeal diagnosis. No infant and not many young children can be examined with the mirror. Normally in any patient the ventricles and the infra-arytenoid area can not be seen completely in the mirror. The anterior commissure is often obscured by the base of the epiglottis. Because of these limitations to satisfactory examination with the mirror, if that method of observation does not reveal the area of laryngeal involvement, then direct laryngoscopy is always needed; and it can be said that direct laryngoscopy is never out of place. It can be done so easily in the office with local anesthesia, with the patient either recumbent or sitting up.

The discussion of benign or malignant tumors of the larynx is not a part of this paper. Your attention, however, may be called to two types of tumors, benign at first but later often becoming malignant. The frequently slow growth and low activity, together with the biopsy, prove their benign character histologically in their earlier stages. Finally the change in character is evidenced clinically, and the later biopsy proves the malignant nature. Usually these tumors are of a low grade malignancy.

Papillomata in the adult which tend to recur, should be carefully examined. The area from which each specimen is removed is to be noted, as often all specimens will not be malignant.

CASE REPORTS

Two cases are cited because of the history and the youth of the patients:

A male, white, 25 years of age, gave the history of having had growths removed from his larynx at intervals since childhood. The report of the laryngologist who had done all of the removal reported that the tumors were benign papillomata. Our biopsies, all done years later, were reported as follows: 7 July, 1936, Specimen from epiglottis, epidermoid carcinoma, grade II.

4 Aug., 1936, Specimen from larynx, histologically benign, but precancerous papilloma of larynx.

22 Sept., 1936, Specimens from epiglottis and larynx, Larynx, epithelioma grade I malignancy, Epiglottis, epithelioma grade I malignancy.

Patient not contacted since.

A second patient, white female, aged 22, complained of hoarseness and pain in throat. She had had laryngeal symptoms for four or five years. Her lesion was on the posterior third of one cord and the interarytenoid space. There was a history of previous pulmonary tuberculosis, and of occupation as a worker in a chromium plating plant. Biopsies over a period of two years were negative. A year before her death from tuberculosis we had positive biopsies for malignancy, and the laryngeal lesion had changed in its clinical behavior.

These two cases, one beginning as a benign

papilloma, the other arising from a chronic inflammatory process, are instructive examples.

The other type of tumor is the more definite and firm broad-based tumor, the fibroma. These tumors which tend to recur or increase after removal or biopsy have definte malignant tendencies. If in laryngology radical treatment of a benign growth is ever advisable this tumor deserves such handling. One naturally hesitates to advise radical surgery without a histologic diagnosis of malignancy.

Fortunately the percentage of occurrence of the two types of laryngeal growths described is low, but the character must be recognized and understood early. Either one, while histologically benign, may be very dangerous clinically. This is true especially of the occasionally seen pedunculated fibroma, if large.

Delay in action is inexcusable after diagnosis indicates a given procedure. Mistaken diagnosis may come about through depending solely upon one means of arriving at a conclusion, such as a biopsy. Either delayed action or mistaken diagnosis often results in the death of the patient. The careful application of the indicated surgery at the opportune time in laryngeal disease is usually most satisfactory.

CONCLUSIONS

1. The primary function of the larynx is respiratory and protective.

2. The prevention of laryngeal disease by removal of irritating factors when possible is efficient prophylaxis.

3. Recurrent or persistent benign tumors in the larynx of the adult patient are always to be considered serious.

150 E. BROAD STREET.

Resuscitation of the Newborn

Asphyxia neonatorum, prematurity, and cerebral hemorrhage are the chief causes of death. The treatment of the latter two is better obstetrics. The treatment of the former is: First, more judicious handling of labor and care in the giving of analgesia and anesthesia; second, recognition of the cause of the asphyxia and appropriate treatment.

Gentleness is to be emphasized.—Walter McMann, M.D., Danville, Va.; Virginia Medical Monthly, Vol. 64, No. 3, June, 1937.

Any physician, trained in the use of a stethoscope, may be taught, or learn, to locate the position of the placenta in utero with a reasonable amount of success; it can be used in the most humble home; it does not require the aid of an X-ray machine, a laboratory technician nor hospital facilities. Finally, it is believed that with the aid of this method of diagnosis, the percentage of morbidity and mortality, in both mother and child, in Caesarean and placenta praevia cases, will be greatly reduced.—H. G. Steele, M.D., Bluefield, W. Va.; W. Va. Med.. Jour., Vol. 33, No. 11, Nov., 1937.

Correction in McConkey Article

The Journal has been requested to publish the following correction in the article on "Some Clinical Aspects of Arthritis", by W. A. McConkey, M.D., Canton, Ohio, published in the October, 1937, issue. Inadvertently the term creatin appears in the text instead of cystine. The second paragraph of the second column on page 1112 should be corrected to read:

"The experimental work relative to cystine deficiency in the nails of the fingers indicates low surphur metabolism and is worthy of note on account of treatment by the use of sulphur which recently has been advised to meet requirements in the case of this disease. . . .

Surgical and Hormonal Treatment of Undescended Testicle

I believe one should always consider the possible harmful effect of a disturbance of the delicate endocrine balance. The hormone should be used with caution and its effects should be carefully observed. If descent does not take place with moderate dosage, continued stimulation of the gland by the hormone should not be produced; an operation should be performed. I also doubt whether boys younger than nine years of age should be given the hormone. At this age puberty is impending and little, if any, harm will result from its use. In all cases I believe a trial of the hormone should be made. In some cases complete descent will not take place but there will be enough improvement in the position of the testicle so that operation will be made easier and more surely successful. An intra-abdominal testicle which is very hard to place in the scrotum by surgery alone can often be made to descend as far as the external abdominal ring. From this position surgery easily places it in the scrotum. In none of the literature, as far as I know, has anything been said about the treatment of the hernia that accompanies 90 per cent of these cases of non-descent. This will, beyond all doubt, at some time require treatment by surgery or injections, and, is another reason why too prolonged use of the hormone is inadvisable, since surgery will be required in any event for cure of the hernia.—John W. Duncan, M.D., Omaha, Neb.; The Jour. Iowa State Med. Soc., Vol. XXVII, No. 10; Oct., 1937.

A PRACTICAL METHOD OF APPROACH IN THE TREATMENT AND PROPHYLAXIS OF ALLERGIC DISEASES

By FRED HAUFREUCHT, M.D., Cleveland, Ohio

IN treating asthma and other allergic diseases, we may consider two modes of approach; first the offending substance, and second, the general condition of the patient. In the light of modern therapy it is customary to attack the former primarily, and to deal with the latter superficially.

The basis for dealing with the allergic substance is to determine which it is, and then to avoid or desensitize the patient to it. The patient may react to many substances and though desensitized to one, two, or three, yet a fourth may bring on an attack. At a later date the patient may become allergic to something to which he previously did not react.

If, on the other hand, the body defenses are built up in a general way, we ward off reactions to all the allergic substances at one time by closing their points of entry. These portals comprise the body surfaces which include the skin, conjunctivae, and mucous membrane of the respiratory, intestinal and genito-urinary tracts.

Now, I assume that if these surfaces are neither abraided nor infected a person does not, as a rule, become allergic. In asthmatic patients we find a defect in one or more of these surfaces, through which foreign substances enter into the blood stream. It is these large molecular substances in the blood stream which cause the attack.

One cannot believe that dust particles can penetrate the normal tissue lining of the respiratory tract, nor that large food particles such as unsplit proteins will pass through the normal tissues of the intestinal tract.

Allergic reactions due to such substances are exemplified in: asthma by dust; urticaria by diphtheria antitoxin and by circulatory bile in obstructive jaundice; chills by impurities in the glucose given intravenously; and in anaphylactic shock by serum therapy. The importance of protecting the body surfaces cannot be overemphasized.

In the industrial diseases of allergic dermal nature the worker is exposed to cuts and scratches, and the material he handles is constantly rubbed into these openings.

With the advent of our central heating systems we have been placed in an environment of lessened humidity. The nasal mucosa becomes cracked due to dehydration, enabling the dust to enter the system. Asthmatic patients fear draughts; keep their windows tightly closed, and sit near the heaters. Thus it is that many patients find relief in the Spring and Summer, or by a sea voyage. Sometimes a patient will complain more in the Summer. This may be due to increased perspiration and dehydration with subsequent drying of the mucous membranes.

The close relationship between an infected bowel and a dermal condition is apparent in pemphigus folliaceous. Bullae rupture, form crusts, and are exfoliated with the surrounding skin. It may appear as a severe scald. The condition ends fatally through intestinal or respiratory complications. It is of unknown etiology. To me it seems possible that the intestinal factors play an important part early, but go unnoticed until late in the disease.

IMPORTANCE OF DETAILED HISTORY

A detailed history is essential. Often a supposedly insignificant point proves to be invaluable in the treatment. The family history shows the allergic trend in any of its varied forms. The offspring is reared under the same conditions as the allergic parent. Their habits are formed early. This is especially true of their dietary hygiene and the diet itself. The home may be kept very warm and dry.

The onset of allergic signs and symptoms is usually in infancy, childhood, and early adult life. Fifty per cent of the infants with eczema have asthma of childhood. Previous operations and accidents should be noted. Many cases of asthma follow operations upon the tonsils. Trauma of the nasal mucosa and malnutrition affect the mucosa so as to allow allergens to enter into the tissues. Excessive alcohol causes a gastritis with consequent indigestion. Too much smoking and too little sleep will retard progress. Some may not bathe frequently enough. Certain occupations are conducive to allergic conditions. The man who stokes the furnace all day is more apt to get asthma. It is routine to find the asthmatic nervous, irritable, and despondent. The attacks vary in intensity with the season and the time of day. A productive cough may be present. The

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Submitted November 10, 1937.

patient may overeat and masticate his food poorly. He will present one or more of the following gastrointestinal disturbances: tenesmus, abdominal pain, diarrhoea, constipation, bloody or purulent stools, and flatulence. Some allergic females complain of abnormal menses. This may be physiological, pathological, or anatomical.

One must examine the patient thoroughly to locate foci of infection, interruptions in the continuity of the body's surfaces, and lowered general resistance. The patient is fatigued and worried. The skin is dry, erupted, and cyanotic. Dandruff may be severe with secondary infection of the scalp. One often finds a sinusitis, an otitis media, a conjunctivitis, or a tonsillitis. The nasal septum is frequently edematous, deviated, or the mucosa dry and cracked. The lips are dry and the tongue coated.

TREATMENT

The treatment is based upon the theory of causation and adjusted to fit the pathological findings of each individual case. If the nasal mucosa is abraided, edematous, or injected, the patient uses saline nasal irrigations for its osmotic and mild antiseptic effect. About 30 minutes later the patient inserts a few drops of mineral oil in each nostril to act as a lubricant. Too frequent and extended use of the saline would defeat our purpose and crack the mucosa. Therefore it should be employed three or four times daily for about a week; then mineral oil alone three times daily until the mucosa has returned to normal. To offset the building of tolerance to one substance, we can substitute one of several preparations for the saline and oil procedure. I have used products containing an antiseptic, a vasoconstrictor, and an oil base. The vasconstrictor allows for deeper penetration of the antiseptic and the oil. All are gradually reduced and eliminated entirely.

The patient should force fluids for two reasons. First, the saline irrigations cause increased secretion by the mucosa; and secondly, the blood volume in the allergic patient is greatly reduced. Their lips are often an indication of the degree of dehydration.

I have seen hay fever clear up in a few days by just this simple procedure. I have also seen patients with asthma and others with hay fever who have always had premonitory symptoms before an attack, abort such an attack by merely drinking a glass or two of water. I have observed a hay fever patient taking a sun bath and sweating profusely, suddenly have an attack. He was relieved in five minutes by drinking a few glasses of water.

It is foolhardy to try to clear the nasal passages without regard for the mouth and throat. The patient should use hot saline gargles at the same time as he irrigates his nose. He may use any other mild antiseptic gargle.

The bronchial secretions should be removed. I have used terpin hydrate compound tablets, (manufactured by Sharp and Dohme), grains two every four hours or as necessary. This is a good expectorant. Forcing fluids is an adjunct to achieve this purpose.

After a few weeks the patient may have a severe attack. This can be explained by the rise of the mucous secretions in the bronchial tree. In Fig. 1 the mucous plugs at (a) and (b) obstruct a small portion of lung tissue (X). Under treatment they rise to the point (c) where about twice as much lung tissue (X and Y) is obstructed. At this stage the patient becomes depressed again. However, under further treatment the mucous plug is expectorated, leaving both X and Y clear. The patient feels better than ever.

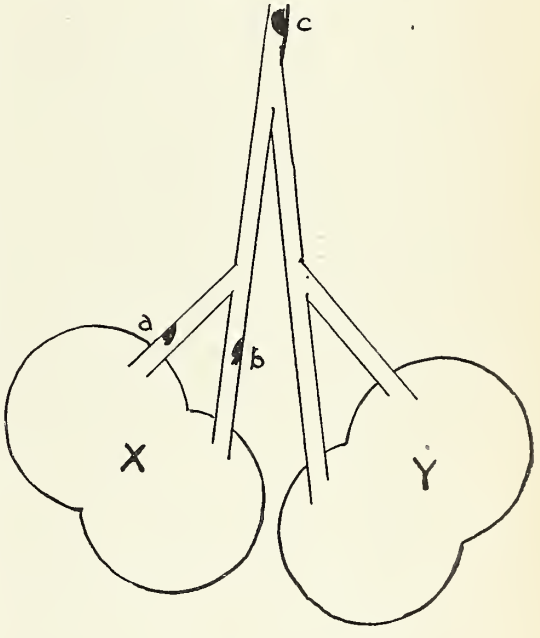


fig. 1

Early and in severe cases, adrenalin may be necessary for an occasional attack. Ephedrine-amytal capsules may be used at bedtime. These are temporary measures which are discarded as the patient progresses. For asthmatics who show limited improvement, lipiodol injected directly into the bronchial tree will be helpful. This latter procedure brings an antiseptic and a lubricant into intimate contact with the involved tissues.

Throughout the winter such patients take Vitamins A and D for the anti-infectious factor. In the summer they get the benefit of the sunshine. Their windows are kept open and they avoid stuffy, overheated rooms.

Hay fever patients must bathe their eyes three

times daily with boric acid solution. This is especially indicated when they have a conjunctivitis.

Those who are sensitive to foods should first learn to eat slowly, to chew well, and to rest a while after a meal. Then they should eat frequently, but very small meals. This will not overtax the stomach. It is wise to eliminate roughage such as dry cereals, spinach, and popcorn. Proteins and fried foods are reduced. A high carbohydrate diet is used early. It favors the fermentative processes and a loose stool. Over a period of from six to eight weeks we build up the diet from a low to a moderate residue. As the stools become more formed, the patient may take a teaspoonful of mineral oil before meals or as necessary. Rarely will a laxative be needed.

In addition to clearing up foci of infection and systemic disorders, the acne patient should avoid rupturing the pustules. The involved parts are exposed to the air and sunshine. Soap is used as little as possible and the skin rubbed gently. The normal areas may be bathed in alcohol. Oils which may become rancid are not used on the skin. Ten per cent Ammoniated Mercury Ointment applied locally helps very much.

Since overwork and little sleep lowers one's resistance, it is advisable for those in strenuous occupations to get to bed early and rest whenever possible.

Water is a good diuretic. The forcing of fluids will relieve the patient suffering with dysuria, polyuria, and oliguria, if the condition is due to a highly concentrated urine. This is often the case in allergic patients who are greatly dehydrated. Any of a number of urinary antiseptics can be used.

Infections of the cervix and vagina are cleared up. A retroverted uterus is replaced. Hormonal therapy is instituted for those cases of physiological menstrual dysfunction.

The nervous, discouraged patient needs encouragement, and is told that he can and will get well. He will then cooperate in carrying out the prescribed treatment. The patient is seen frequently to check over the many details of his routine.

In carrying out the above procedures one must understand that we are trying to build and maintain the body in a normal healthy state. We locate the sources of disorder and clear them step by step. With this in mind we see that each case may present a different problem, but the ultimate results are the same.

More important than the cure is the large field opened by prophylaxis. The 50 per cent of the infants with eczema need not have asthma of childhood.

2010 E. 102ND STREET.

Some Allergic Problems Puzzling to the General Physician

Under the designation "acute colds" are hidden mild allergic reactions, many of which are atypical cases of hay fever, or pollinosis; this is especially true where the significant signs and symptoms (itching and congestion of the eyes, lacrimation, nasal congestion and discharge, and sneezing) are lacking except for one or two of their members. For instance hay fever with the one symptom of nasal congestion or of headache, or of irritation of the eyes, alone may present some difficulty in diagnosis, particularly where the seasonal limits are indefinite. A young man of twenty-five suffering each Spring with a persistant nasal obstruction, without sneezing, lacrimation or irritation of the eyes, was considered as having a case of "Spring colds" due to the changeable weather, until the periodicity furnished the clue that led to the diagnosis of tree hay fever proven by a positive intradermal test, and the resultant treatment with an extract of sycamore tree pollen. A young boy of nine years was seen with a conjunctivitis and an episcleritis which occurred late each summer soon after the beginning of the school term and lasted several weeks, being attributed to the increased eye strain after the summer vacation. It had not responded to the usual therapy. There were no nasal symptoms. Since the seasonal limits were similar each year, and corresponded to the autumnal hay fever season, the case was suspected of being atypical hay fever, which was verified by a positive cutaneous test, and the resultant treatment was with ragweed pollen evtract.—J. A. Rudolph, M.D., Cleveland, Ohio; *The Journal Lancet*, Vol. LVII, No. 10, Oct., 1937.

Diagnosis and Management of Allergic Cases

Do not expect such immediate results from your own work and do not promise them to those patients you may see fit to refer to a fellow physician making a specialty of allergy. If you will recognize the conditions perhaps due to allergy and make attempts to handle them along such lines, you will be practicing that phase of medicine according to the standards of present-day knowledge. Before starting the management of any allergic case bear in mind that you are dealing with a chronic condition that perhaps will not be relieved by other measures and a condition with very illusive causative factors which may require months to detect.—Kilby P. Turrentine, M.D., Kinston, N. C.; Southern Med. & Surg., Vol. 99, No. 10; Oct., 1937.

THE RESULTS OF TEN YEARS' EXPERIENCE WITH VARIOUS SOLUTIONS USED IN THE INJECTION TREATMENT OF VARICOSE VEINS AND ULCERS OF THE LEGS

By C. H. VEROVITZ, M.D., Cleveland, Ohio

IT IS not often that the practice of medicine is influenced by Old Lady Fashion, but recently there has been an effect of this kind taking place. Short skirts and thin silk stockings have revealed the presence of any existing unsightly veins. This has caused their feminine owners a great deal of distress.

A vein is said to be varicose or dilated when it becomes permanently lengthened and more or less tortuous. The valves are placed at intervals in the veins with the idea of preventing a reverse flow of the blood distally in the extremities after it has been carried forward towards the heart. That the adaptation of these valves are not uniformly adequate is shown by the marked variations in the number and position of the valves.

The superficial veins of the leg, the internal and external saphenous, especially the internal, are the most commonly affected veins in the body. Other veins may also become varicose, as for example those causing varicoceles, namely the spermatic veins and those causing hemorrhoids, namely the hemorrhoidal veins. Varicose veins have been found in the vulva, labia majora, broad ligament, urinary bladder, and brain. Splenic and renal veins are sometimes found at operation to be varicose and probably are the cause of the preoperative symptoms in some cases, especially duodenal ulcer.

ETIOLOGY

The saphenous system has been put to an unusual strain through man's assumption of the erect posture. The anatomic course of the saphenous veins deprives them of an important aid in the venous return, namely the milking effect of muscular activity of the legs. These veins are unsupported by muscle tissue which lies between the skin and the fascial layer. Therefore because of the heavy hydrostatic load carried by the saphenous veins, any inadequacy of the valves tends to increase the venous pressure in the most dependent parts of the veins and their tributaries resulting in definite anatomical changes which manifest themselves externally as varicosities.

We have found by questioning all of our patients that in 75 per cent of the cases, one or both of their parents were afflicted with varicosities. Therefore we can assume that the tendency is hereditary. Not only may several members of the same family in succeeding generations suffer from varicose veins, but it is often found that the same vein or segments of a vein is involved in all of them.

Many of these patients that give a family history of varicose veins also present other evidences of connective tissue weaknesses of the venous and ligamentary structures, such as hemorrhoids, varicoceles, and flat feet, also other general connective tissue weakness as associated with enteroptosis.

The definite physical factors which directly account for the mechanical disabilities involved can be enumerated as follows:

(1) Increase in the intra-abdominal pressure during heavy lifting, coughing, deep expiration, or any other condition which would cause a contraction of the abdominal muscles such as chronic bronchial conditions, pneumonia and pregnancy.

(2) Increased venous pressure in certain diseases of the heart, lungs and liver, may be so raised as to cause localized dilatation of such veins as are congenitally weak.

(3) Direct pressure of a neoplasm or a gravid uterus on the large venous trunks in the pelvis may so obstruct the flow as to distend the veins of the lower extremities. It is a common experience to find varicose veins dating from an antecedent pregnancy.

(4) Varicosities occur in the lower limbs of athletes, sudden strain may rupture the valves and render them incompetent, inducing varicosities independent of any congenital defect.

(5) Prolonged standing or walking, by allowing gravity to act on the column of blood in the veins of the lower limbs is also a factor in the production of varicose veins. This is the penalty a human being pays for being in the upright position. Lower animals do not have varicose veins.

(6) Pressure from constricting clothing—tight garters, bloomer bands, corsets and girdle belts.

(7) Thrombosis of the deep veins in the leg

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may induce marked dilatation of the superficial veins by throwing an increased amount of work on them, causing compensatory dilatation by re-routing the blood.

Various theories have been advanced to account for these various changes.

(a) Kashimura, a Japanese surgeon, offers the explanation that during life there develops a loss of the nerve and muscle tone of the vein wall which allows the dilatation to take place. At first there is a stimulation of the sympathetic nerves and later a relaxation and a secondary degeneration of the vein. He states that varicose veins are rare in Japan because orientals do most of their work in a sitting posture, squatting on the floor. However, in this country they stand for many hours of the day in their laundries and develop varicose veins.

(b) The theory of Klotz that a degeneration of the valves in adult life with a loss of their tone and a secondary gradual atrophy, is one of the chief causes in the development of varicose veins.

(c) There is a progressive degeneration of the valves with age and loss of function allowing the reverse flow to occur.

(d) Professor Noble is of the opinion that lues is a causative factor in only a very small percentage of cases.

(e) Some favor the infection theory as the principal cause in the development of varicose veins either embolic or by direct extension from local infection.

(f) The fact that the development of varicose veins so often follows attacks of typhoid, diphtheria, influenza, bronchial infections, rheumatism, scarlet fever, pneumonia and pelvic infections in women.

(g) Zazas seems to bear the theory that there is a bacterial toxic and hemo-toxic substance liberated during the course of a general infection of the body which would directly affect the tissues of the vein wall.

(8) Varicosities following phebitis, the inflammatory process which often follows operation, childbirth, or infectious diseases sweeps through the length of the vein destroying all the valves. Thrombosis is followed by canalization and the vein is converted into a firm, thick-walled, valveless structure, which permits a much greater degree of regurgitation than do the extremely dilated tortuous varicosities. The inflammatory process may also involve the communicating veins with a consequent crippling of their valves. The circulation is greatly impaired because of the simultaneous regurgitation through both the saphenous and the communicating veins. These limbs often display the most extensive and intractable ulcers which may be associated with little or no visible varicosities.

THE MORBID ANATOMY OF VARICOSE VEINS

The essential lesion is the absence or deficiency of the valves so that they are incompetent and thereby fail to support the column of blood which bears back upon them. Normally the valves in the femoral, iliac, and inferior vena cava veins are imperfectly developed, so that in the erect posture the great saphenous receives a large share of the backward pressure of the column of venous blood below the heart level. The whole length of the vein may be affected, but as a rule the disease is confined to one or more segments which are not only dilated, but also increased in length, so that they become convoluted vessels. The adjacent loops of the convoluted veins are often bound together by fibrous tissue. All the coats are thickened chiefly by an increased development of connective tissue, and some cases are similar to those of arteriosclerosis.

The walls of varicose veins are often exceedingly brittle. In some cases the thickening is uniform and others irregular so that here and there thin-walled sacs or pouches project from the side of the vein. These pouches vary in size from a bean to a hen's egg. The larger forms are called venous cysts. They are most commonly found in the region of the saphenous opening and the opening of the popliteal fascia. These pouches when exposed to injury are frequently the seat of thrombosis.

Due to the pumping effect of the muscular contraction and relaxation of the skeletal muscles, the return of blood through the deep veins is facilitated and if the deep veins are patent, the superficial veins will empty normally, and the burden of carrying the venous blood is divided between these two groups of veins, the deep vessels carrying most of the blood flow. If the deep veins are not patent, naturally, the superficial veins must carry the entire venous load and it follows that any incompetency of the valves of the superficial veins will embarrass these veins and cause stagnation, edema, anoxemia, and malnutrition of various degrees in the surrounding tissues.

In some cases of phlebitis the inflamed vein is palpated as a firm, indurated, tender, cord-like structure. In others there is an oval or round area of redness, induration and tenderness extending around the phlebitic area. These thrombophlebitic patches constitute localized areas of superficial cellulitis going out from the inflamed vein. When the inflammatory process subsides, there is left pigmentation and induration with fixation of the skin to the subjacent tissues and atrophy of the integument. These regions of impaired resistance are potential sites for eczema and ulceration.

Varicosities of the superficial veins of the lower extremity consist of dilated, elongated and tortous veins. Associated with the dilatation and elongation are degenerative changes which occur in the wall of the vessel. As a result of the dilatation and tortuosity, incompetency of the valves occur. Because of the marked dilatation and tortuosity, communication between the two adjacent loops of a vein may result, producing large venous sinuses.

CLINICAL FEATURES AND SYMPTOMATOLOGY

Varicosities are most frequently found between the ages of 20 and 40, predominating in the fe-

male sex. In my clinic, 65 per cent are females. In office practice, the percentage is the same. Subjective symptoms are variable, the amount of discomfort bears no direct proportion to the extent of the varicosity. It depends rather upon the degree of pressure in the veins, as is shown by the fact that when the limb is gradually elevated, thus reducing the pressure, the pain is alleviated accordingly. When the whole length of the main trunk of the great saphenous is involved the pressure in the vein is high and the patient suffers a good deal of pain and discomfort. When the upper part of the great saphenous vein and its valves are intact and the more distal veins are involved the pressure is not so high and there is comparatively little suffering. The usual complaint is of a sense of weight and fullness in the limb after standing or walking, sometimes accompanied by actual pain from which relief is at once obtained by raising the limb.

Early symptoms of progressive venous insufficiency are a tired, heavy sensation in the legs and cramping of the calves at night; sometimes slight swelling of the dorsum of the foot and ankle; marked cramping of the calves during swimming, especially if the water is cold. The incipient varix may even bring more discomfort than the fully developed disease. When the dilatations reach a certain stage, the pressure and traction on the saphenous nerve which accompanies the saphenous vein produces a painful sensation along the course of the nerve.

At this stage, the skin feels tense and it may burn or itch. The patient complains of fatigue and pigmentation of the skin may occur as a result of stagnation, especially in the most dependent area, drained by the long saphenous vein, just above and on the medial aspect of the ankle. As a result of stagnation in the varicose veins, there occurs in the blood an accumulation of waste products, especially non-protein nitrogen and uric acid. In the blood of varicose veins, the carbondioxide content is increased and the oxygen content is decreased.

DIAGNOSTIC SIGNS

In women in whom the subcutaneous fat is much more abundant than in men, comparatively extensive varicose veins may be present, with little to show for it externally. Oftentimes, however, in the thigh there may be no veins visible and in the calf, masses of veins may stand out as tortuous blue cords or may throw the skin into ridges like a mole's burrow.

In advanced cases bead-like swellings are sometimes detected over the position of the valves and on running the finger along the course of the vessel, a firm ridge due to periphlebitis, may be detected on each side of the vein. When the limb is edematous, the outline of the vein is obscured, but they can be identified on palpation as gutter-like tracks.

It is very important in every case of varicose veins of the lower extremity to determine whether or not the valves in the superficial and communicating veins are competent and whether the deep veins of the extremity are patent. Occasionally in cases with thrombosis of the deep veins, a compensatory dilatation of the superficial veins occurs, because of the inability of the deep veins to conduct the blood away from the extremity. These compensatory venous dilatations are not true varicose veins and do not always follow the course of the internal and external saphenous veins. They frequently present a typical convoluted vein on the dorsum of the foot, lower lateral part of the leg, and on the lateral aspect of the thigh.

The necessity of recognizing these special dilated veins before obliterating any compensatory superficial veins is very important.

A very important error is to diagnose varicose veins, when other conditions are responsible for the symptoms presented. Such conditions as sacroiliac or lumbosacral arthritis, sciatica, flat feet, spondylolisthesis and genuvalgum, may be overlooked in the presence of a few insignificant varicose veins.

At this point it may be wise to mention some of the common errors which are made in diagnosing the presence of non-obvious varicosities. Often femoral hernias and small muscle hernias in the lateral aspect of the lower leg in young athletes are erroneously injected as varcosities.

The competency of superficial and communicating valves and the patency of the deep veins are determined by the following tests: Trendelenburg No. 1 and 2 tests, and Von Perthes Test, the description of which time limitation does not permit at present.

Complications of varicose veins are ulcers, phlebitis, eczema, rupture of a vein and superimposed skin infection, as ringworm infection for instance, which easily spreads over such areas. Varicose veins give rise to four types of chronic ulcers of the legs:

Type 1. Ulcers develop in areas surrounded by either small or large superficial veins. These veins are distal, proximal, medial or lateral to the ulcer, "so-called feeders to the ulcer". The ulcer tends to "ride" upon a varicose vein, and even when induration is so extensive as to disguise the presence of a large vein behind the ulcer, the fluctuant tract leading into the ulcerated area can often be palpated. The presence of stagnating blood stretches, atrophies and finally ruptures the skin. This is the most frequent type of varicose ulcer. In this type of ulcer, injection treatment with sclerosing agents is best.

Type 2. Frequently following an injury, an infection is present, and this infection, spreading to the adjacent veins, causes a thrombophlebitis, later a small erosion of the skin and finally an ulcer. Sclerosing agents are used successfully after the phlebitis has subsided.

Type 3. The skin has been damaged by a previous thrombophlebitis, of several months duration. There are no visible or palpable veins in the area of the ulcer. This is called postphlebitic ulcer. For this type, injection of autogenous blood is very good.

Type 4. This is the severe type of ulcer where the deep veins are involved, alone or combined, with incompetency of the intercommunicating veins or perforating veins. The valves of these perforators are absent or have become disabled. The burden of the already overloaded superficial system is actually increased. These perforating veins play more of a part in the localization of the ulcer than is generally believed. In the midcalf perforating veins are normally most numerous. The aggregate capacity of varicose veins is usually greatest in the middle half of the lower leg. It follows thus that stagnation is most marked here. If competent perforators are connected with such a lake, passive congestion will certainly be many times increased. It is, in fact, not at all unusual to find hugely dilated communicating veins, connected with the superficial varicose vessels, upon which an ulcer rides. In this type, autogenous blood is given in the ulcer.

CAUSE OF VARICOSE ULCER

Competent valves in the superficial communicating and the deep systems make it possible for the blood to flow cephalad.

There is an increase in the venous pressure in all three systems, and because of the back pressure the veins lengthen and become tortuous and dilated. This is first evidenced in the superficial system because these veins are least supported by the perivenous tissues. The further effect of interfering factors to normal upward flow in dilatation, which leads to stagnation of blood between the valves, and sooner or later to valvular incompetency. Once the valves give way, there is a reversal of the flow, and instead of its going cephalad, it goes caudad. This happens first in the superficial system, the blood reaches the heart only through the deep veins by way of the communicating veins. If the valves at the sapheno-femoral junction are incompetent, some of the blood in the superficial system, which has reached the deep system and has gone upwards may and does return again to the superficial system (a vicious circle being formed).

This vicious circle leads to an increased venous pressure and to increased stagnation of blood in the superficial system, until the burden becomes so great that the valves of the communicating system become incompetent and then the vicious circle becomes more pronounced. Sooner or later the venous pressure is such that it is no longer possible for an exchange of fluids between venous capillaries and tissue cells. This leads to an edema of the tissue cells, with interference to their reception of nutrition and proper oxygenation from the arterial capillaries. We have then, stagnation, edema, and finally anoxemia.

This reflux flow waterlogs the perivenous tissues thereby stretching the fibers and cells apart and keeping the cells surrounded by serum. The cells are poorly oxygenated, lacking in nutrition, and saturated with lactic acid and other products of metabolism. If these metabolic products are not eliminated acidosis develops locally.

Stagnation, edema, and anoxemia present, secondary infection follows in time. Infection leads to inflammation of the perivenous lymphatics and their obstruction leads to lymph stasis and induration of surrounding tissues. As Payne says, "these become nothing but stagnating and stinking sewers, inundating an adjacent field and rendering it barren".

It is now simple for a slight trauma to initiate an ulcer in such tissues. To summarize, we have a perversion of physiology by reversal of flow. Stagnation, edema, anoxemia, ulceration and finally secondary infection sets in.

TREATMENT

The development of the injection treatment of varicose veins as a safe, effective and expedient therapeutic measure has done more than give relief to thousands of sufferers. It has made an interesting and satisfied group of patients who were formerly the despair of the doctor in private practice and the bane of the dispensary.

As a result we have seen the development of a large clinic devoted to the treatment of patients with vericose veins and its complication. I propose to present here the impressions gained and the methods used in the clinic for varicose veins and ulcers of the legs in the Surgical Dispensary at St. Vincent's Charity Hospital, Cleveland, Ohio.

The clinic has been in operation for 11 years. The injection treatment has been found to be the most effective way of blocking the regurgitation of venous blood downward. It has replaced surgery. Contrast the simplicity of intravenous injection to the surgical removal of veins, instead of a hospital confinement with the dangers of anesthesia, incisions, long tedious dissections, sutures and scars and possible serious postoperative complications like embolism. Simple intravenous injections can be given in the office or dispensary. The patients can continue with their regular work with only moderate discomfort. The difference in cost, time, disability and danger of the two methods is very great.

The simplicity of the treatment, however, is in direct relationship to the knowledge the physician has of physiology of the venous circulation and the pathology of the varicose veins with its possible causes, his recognition of the limitations and contra-indications of the injection treatment, and finally his skill in making venous punctures. The object of the injection into the varicose vein is to obtain a firm clot in a limited selected area. The injection of various sclerosing solutions causes an aseptic irritation to the intima, injur-

ing the endothelial cells, producing a chemical venitis; this is followed by an adhesive clot, and subsequent adhesion of the walls of the vein.

The vein becomes hard, shrinks and finally becomes a solid cord of fibrous tissue. This chemical venitis, which differs from an infective phlebitis with its unlimited involvement of a friable clot, is limited in extent to the area of endothelium affected by the injected fluid, and the clot is very tenacious and non-friable, so that instead of being broken up and carried away piecemeal to the heart, it remains attached to the vessel wall where it is slowly absorbed and eliminated.

VENITIS AND PHLEBITIS

Chemical irritation of the vein that Sicard and Forestier named, "Venitis", is substantially different from the process of infectious irritation of the vein called phlebitis. A venitis is localized, generates a very adhesive clot, does not give rise either to pain or to general edema of the limb, and leaves an atrophied cord-like vein. In phlebitis there is frequently an extension from the superficial network to the deep lying network causing edema of the limb. The clot is often loose and afloat in the blood. There is pain, and atrophy does not take place. The vein remains hard and bulky, and further attacks of infections are possible. Phlebitis may give rise to embolism. In venitis, embolism does not occur.

Several authors describe the treatment as an intravenous injection, but it is desirable to draw the physician's attention to the fact that a strictly local effect is obtained rather than a general circulation of the remedial agent in the blood stream.

DIRECTION OF THE VENOUS FLOW IN VARICOSE VEINS

Ten years ago 12 patients were injected with lipiodol. The injections were given in the middle of the leg. These patients were put behind a fluoroscope. In three of the patients the lipiodol remained stationary at the site of injection. In eight patients the lipiodol went towards the toes. In one patient the lipiodol was seen in the middle of the thigh one hour later. Five hours later the column of blood lipiodol mixture was back in the middle of the leg. This demonstrates that the column of blood in a varicose vein flows slowly, remains stationary, or reverses its flow. In most instances the flow is reversed. The direction of the venous flow is not toward the femoral vein and the heart, but on the contrary the blood flows distally from the saphena femoral opening downwards through the veins of the lower leg, through the communicating veins into the deep veins in severe cases.

INDICATION FOR INJECTION TREATMENT

First let me mention that a thorough and systematic examination of the patient should be made before any injections are given. Examination should consist of: Throat, teeth, tonsils, thyroid, lungs, heart, kidneys, liver and pelvic organs. Urine tests and Wasserman if an ulcer is present.

(1) Superficial, painful varicosities with or without functional impairment.

(2) Those complicated with ulcers, eczema, pruritis. Many of the ulcers have veins leading into the ulcer, which are the so-called "feeders" to the ulcer.

(3) Prominent varices without symptoms that patients wish to eliminate for esthetic reasons.

(4) Varicose veins associated with arthritic pains about the knee and ankle.

CONTRA-INDICATIONS FOR INJECTION TREATMENT

1. Old persons with enfeebled health.
2. Cardiac disease or vena caval obstruction.
3. Nephritis.
4. Diabetes. (Only in select cases, but do not use sugar solutions).
5. Varices accompanied by an extensive oedema of the lower limbs.
6. Varicose phlebitis, deep vein phlebitis, acute or subsiding superficial phlebitis. No injection should be given an inflamed superficial vein until at least six months has elapsed. If the veins are hard, tender, swollen and phleboliths are palpable, an effort should be made to test for latent infection which may be rekindled by the chemical injection.
7. Insufficiency of endocrine glands as in acromegaly. In these cases combine pituitary with local treatment.
8. Varices accompanying late pregnancy. Injections can be given up to the sixth month. Quinine must not be used alone.
9. Buerger's and Raynaud's diseases.
10. Hyperthyroidism.
11. Active tuberculosis.
12. Acute colds.
13. Trendelenburg double positive. (i. e. deep vein involvement).
14. Marked focal infections. These require attention before vein treatments are begun or metastatic phlebitis results.

THE VARIOUS SOLUTIONS USED

The solutions used were, (1.) Quinine urethane, 10 per cent, aqueous solution. (2.) Sodium salicylate, 20 per cent, aqueous solution. (3.) Sodium chloride, 20 per cent aqueous solution. (4.) Dextrose, 50 per cent, aqueous solution. (5.) Dextrose, 50 per cent, sodium chloride 30 per cent combined. (6.) Dextrose 30 per cent, Sodium chloride 10 per cent combined. (7.) Sodium morrhuate, 5 per cent alone. (8.) Sodium morrhuate, 5 per cent, and quinine alkaloid, 2 per cent combined.

The ideal sclerosing solution for the injection treatment of varicose veins should meet the following requirements: (1.) It must be of low toxicity. (2.) It must produce perfect sclerosis. (3.) It must not cause pain. (4.) It must not produce cramps. (5.) It should not, if extravasation occurs, produce any slough. (6.) It

should have such a powerful sclerosing action that only small amounts are necessary to produce the desired results. (7.) It must be of such low toxicity, that multiple injections may be given at one sitting. (8.) It should possess bactericidal properties, so that all danger of infection is prevented. Infection often follows injections of obliterative solutions which are not bactericidal. (9.) It should not produce allergic reactions or hypersensitivity. (10.) It should form an adherent clot instead of a marked thrombosis. After the destruction of the endothelium the walls of the vein should adhere. With most of the sclerosing solutions there is no danger of embolism since the clot formed is very tenacious and non-friable and instead of being broken up and carried to the heart it remains attached to the vessel wall.

Quinine urethane used in 75 cases: This drug is a powerful irritant to the lining of the vein, causing marked sclerosis. The blood in the vein is either squeezed out as the lumen of the vein gradually narrows, or is coagulated. The resulting clot is extremely tenacious and non-friable, and is not apt to cause emboli.

This solution is a satisfactory agent except for slough formation if injected outside the vein. It also produces in some persons distressing symptoms from quinine idiosyncrasies (cinchonism), characterized by collapse, giddiness, faintness, nausea, vomiting, hot flushes, palpitation, and hypogastric discomfort. When quinine solutions are injected into the blood stream, most of the quinine is almost immediately absorbed out of the blood into the endothelium lining of the veins. The quinine is impregnated into the tissue for a considerable time, in this way preventing infection. Quinine is more destructive to the endothelium than any other substance used in the injection treatment of varicose veins. Therefore, up to 1933, the two best and most effective sclerosing agents used by leading specialists and general practitioners were sodium morrhuate and quinine.

RESULTS

In ten of the cases quinine caused intense pain and marked tenderness to the part injected, which lasted for weeks following the injections. In three cases ringing of ears and headaches followed the injections. In three cases scarlet tiniform erythemas followed the injections. In one case the patient claimed he tasted the drug a few minutes after the injection had been given.

This solution, must not be given during pregnancy, menstruation, or to any individuals who are markedly hypersensitive. When quinine is given in veins in which the walls are very thin a slough occurs, due to leakage through the vein wall. In a few cases a post-obliterative or delayed slough occurred. This slough is one which occurs in a few weeks or several months after the injection of a thin walled vein.

The solution not only destroys the intima, but also the atrophied media and adventitia of the vein wall. With careful examination, these thin walled, superficial veins, that are likely to produce delayed sloughs can be detected. Severe sloughs occur by injecting outside of the vein wall. The local damage is severe and may take from five to six weeks to heal. Blood blisters occasionally form and are due to leakage of blood mixed with quinine urethane solution, into the subcutaneous tissues at the site of injection.

SUMMARY

This solution, when injected, produces: (1.) A positive and firm sclerosis in about 75 per cent of the cases. (2.) Cramps following the injection. (3.) Pain following the injection. (4.) It has a low viscosity. (5.) Small dosage required. (6.) It is very toxic. (7.) When extravasation takes place usually a slough occurs. (8.) Quinine solutions are batericidal. (9.) It does produce cinchonism on patients who have an idiosyncrasy to the drug.

I believe this solution does not possess the qualifications to make it an ideal solution, for the injection treatment of varicose veins.

Sodium salicylate: Twenty per cent solution was used in 450 cases. An injection of five c.c. was given once a week. In a few, multiple injections were given at one sitting. This solution gives the most marked sclerosing, but also the most marked cramping. There are at times a very marked peri-venitis after the injection with infiltration, redness and tenderness of the skin. Sometimes marked infiltration of the subcutaneous tissue surrounding the veins may persist for weeks in spite of hot applications. Some of the patients are extremely uncomfortable. Faulty injections result in local gangrene with a very slowly healing wound, which of course is not dangerous, but is most disagreeable and painful to the patient.

Sodium salicylate is best suited for large varices of the long saphenous system. A referred cramplike pain usually occurs in the ankle immediately after the injection is given and lasts from one to five minutes, and is relieved only by elevation of the leg. It is necessary to retain the solution within the vein as a leakage into the tissues will cause a severe slough.

The susceptibility of the patient is gauged by giving one or two cc. of the 20 per cent solution for the first injection. If this is tolerated without local reaction, treatment is given the next day. Five cc. of the 20 per cent solution is used. Several sites of varicosities were injected with one-half to two cc. given in each injection and a total of eight cc. of the 20 per cent solution may be given at a sitting. In the dispensary five cc. of a 20 per cent solution was administered at

weekly intervals and continued for several weeks or months until the veins were obliterated and ulcers healed.

RESULTS IN THE FOUR HUNDRED AND FIFTY CASES

In about 75 per cent of the cases the results were good. In 25 per cent of the cases, severe cramps at the time of the injection and following the injection resulted. This drug is very toxic, and patients complain of headaches and ringing in the ears. (Salicylism). When extravasation took place a marked slough followed. It was exceedingly indolent in healing and left a large, pigmented scar. A softer thrombus followed the injection of salicylate solutions than the quinine solutions. There was a greater tendency to recanalization and recurrence of the varicosities with the salicylate solution. This solution is not bactericidal. In many arthritic cases the pain disappeared following the salicylate injection. I believe, this solution does not possess the qualifications to make it an ideal solution for the injection treatment of varicose veins.

Sodium chloride, 20 per cent, 50 cases: The average amount given at each injection was five to ten cc. It was non-toxic to the general system, marked cramping resulted. There is a danger of necrosis when given outside of veins. This solution is not bactericidal. A firm sclerosis occurred in only 50 per cent of the cases. The clot was not as firm and adherent to the vein wall, as the clot produced by quinine solutions. The author does not recommend this solution.

Dextrose solution: The sugars used alone are much less irritating, but must be employed in large amounts to be effective and should not be used in diabetics. Dextrose, 50 per cent, ten cases, given in five cc. doses had a very high viscosity and was exceedingly hard to inject. Therefore, it is not recommended.

Dextrose, 50 per cent, and sodium chloride, 30 per cent, ten cases. The viscosity was very high and severe reactions followed. Necrosis resulted when given outside of the vein wall. Most of the patients had severe cramps following the injections. This solution is not bactericidal. This combination is not recommended by the author.

Dextrose, 30 per cent, sodium chloride 10 per cent and benzyl carbinal 1 per cent, the latter for its anodyne effects. This preparation is known as varisol.

RESULTS IN NINE HUNDRED CASES WITH VARISOL

This combination has a good sclerosing effect. When injected in the vein it gave less cramping than the previous two agents. There was less perivenous reactive effects, rapidity of end results, no systemic reaction and it gave a good cosmetic result. A good many patients were satisfied. Multiple injections were given once a week, 10 cc. in each injection, and multiple injections could be given at one sitting. I have injected 100 cc. in 10 cc. doses in the office at one sitting.

This solution contains physiological substances which are normally present in the circulating blood. Toxic general reaction happens very rarely. If injection is given in the subcutaneous tissue, necrosis will occur. If the injections are given carefully, this solution can be employed with a considerable degree of safety and with a satisfying result.

CONCLUSIONS

This solution, when injected, gives: (1.) A positive and firm sclerosis in 75 per cent of the cases. (2.) Produces cramps. (3.) It is painful in many cases. (4.) Large dosage required. (5.) Low viscosity. (6.) Non-toxic. (7.) When extravasation takes place, slough occurs. (8.) This solution is not bactericidal; still does not possess the necessary qualifications to make it an ideal solution.

RESULTS IN FOUR HUNDRED AND FIFTY CASES

Sodium morrhuate is made up of the sodium salts combined with the fatty acids of cod-liver oil. This drug was first prepared by Sir Leonard Rodgers. Its value as a sclerosing agent was accidentally discovered when used intravenously in the treatment of tuberculosis. Sodium morrhuate is used in a 5 per cent solution combined with benzyl alcohol for its local anesthetic effect. The amount to be injected depends on the size of the vein. The average injection given was one cc. although with a very large vein you can give up to five cc. Multiple injections given by the author at one sitting has been 20 cc. without any after effects. A 10 per cent solution may be used in resistant cases.

The first action of this drug, is an irritation of the endothelial cells lining the vein. The second action is on the blood contained in the vein. A thrombosis is formed which later becomes organized. In many of the cases sodium morrhuate produces a thrombosis, not an adhesive clot to the vein wall, which is desired. Some believe the thrombosis is due to the unsaturated fatty acids present plus the alkaline reaction produced by the hydrolytic action on the blood. Infection often follows injections of obliterative solutions, which are not bactericidal. Sodium morrhuate is not bactericidal.

There are two types of allergic reactions with sodium morrhuate. (1.) Localized. (2.) Constitutional. (1.) Localized manifestations of allergic reactions due to sodium morrhuate consist mainly of urticarial rashes appearing at the site of injection. The author has seen a good number of such cases. (2.) Constitutional reactions. Having seen severe anaphylaxis occurring in five cases I feel that a real danger exists in the use of

sodium morrhuate injections, in those patients who have previously received this solution and developed a foreign protein sensitiveness. This reaction is not due to some liver protein remaining in the solution, but rather a specific reaction due to an idiosyncrasy to the sodium morrhuate. In a few of the cases the patient complained of local burning.

The immediate results with this solution are good. There is very little local reaction after injection, clotting is rapid and often appears after a few minutes. Sodium morrhuate generally does not produce an immediate cramp. It does, however, often cause a severe burning, stinging or lancinating pain which begins several minutes after the injection. This pain may last from an hour to several days and often confines the patient to bed. The injection ulcer, or slough which is the bugbear of all injection therapy, is not likely to occur if given in the lumen of the vein. The dose recommended is one to five cc. A large number of veins in the legs can thus be treated at one sitting.

THE DISADVANTAGES OF SODIUM MORRHUATE

In 25 per cent of the cases injected there was a recurrence by recanalization owing to the resultant clot being soft and friable. The solution is therefore not to be recommended for large veins. Five per cent of cases develop urticaria a few minutes after the injection of a large dose. It is, however, a very useful solution to employ for the treatment of small superficial veins, (Spider veins, by the "froth" method), especially those that are very near the surface and look as if they might burst at any time. Here the venous pressure is very low and they do not become recanalized. However, with these veins being so near the surface leakage is apt to occur along the needle track.

The author has found 25 patients in his series of 1200 patients, who were sensitive to sodium morrhuate injections. Other men claim 3 per cent of their patients gave allergic reactions after the injections of sodium morrhuate. The anaphylaxis presented by the 25 patients were as follows: Urticarial rash, (the most common) dermatitis, bronchial spasm, intestinal spasm, vertigo, fever, malaise, cyanosis, slow pulse, (fifty per minute, bradycardia), and in one case the pulse would skip a few beats. One should be careful with individuals who are subject to asthma, hay fever, or any other allergic phenomena when using this drug.

CONCLUSIONS

1. In a few minutes, the vein becomes hard and distended for a distance of about one inch from the point of injection. Sodium morrhuate does not produce the cramp or pain as in the previous solutions.

2. It is apparently not as destructive to tissues as in the previous solutions. It produces tissue necrosis or slough if injected outside of the vein.

3. It produces a firm obliteration of the vein with very little periphlebitis.

4. In a few cases it is toxic, giving rise to gastro-intestinal disturbances.

5. The author has encountered a number of reactions which were definitely allergic in character. The reactions may follow the initial injection or they may appear near the end of a series of injections. Some patients have a severe systemic reaction (prostration) marked drop in systolic blood pressure. Some have urticaria of the whole body, most marked on the arms and chest. In three cases marked edema of the ankles followed the sodium morrhuate injections. The allergic reactions following the injection of sodium morrhuate as the amount of protein is too small to account for any allergic reactions. Sodium morrhuate is recommended as a good sclerosing agent, but not the ideal solution for the injection treatment of varicose veins.

TREATMENT WITH MORU-QUIN. FIFTEEN HUNDRED CASES

Moru-quin is a combination of sodium morrhuate, 5 per cent, alkaloid quinine, 2 per cent, and benzyl alcohol, 2 per cent.

In a comparison of moru-quin with the sclerosing solutions mentioned, as quinine urethane, sodium chloride 20 per cent, sodium salicylate 20 per cent, dextrose 50 per cent alone, combinations of dextrose 50 per cent, and sodium chloride 30 per cent, dextrose 30 per cent, and sodium chloride 10 per cent (Varisol), or sodium morrhuate, moru-quin is superior in every respect. It has distinct advantages over the other solutions mentioned. The sclerosing action is exceedingly rapid and positive. In some cases the veins were sclerosed in one week. Cramping of the muscles, following the injections, is reduced to a minimum. There is little tendency to produce gangrene and sloughing if extravasation accidentally occurs. The solution is relatively non-toxic. There is little discomfort following the injection and judged by my results, moru-quin is a sclerosing agent of unusual merit.

The margin between the therapeutic dose and the toxic dose is a wide one; the latter is very important. I have given eight cc. in a very large vein with no toxic effect, also 24 cc. given to one patient in multiple injections, one cc. to each vein. Twenty-four injections were given at one sitting with no toxic effects. The author has injected one-half cc. of moru-quin into his arm and experienced no ill effect beyond a slight tenderness. Histological sections taken of veins injected with moru-quin proved the sclerosing action of moru-quin was superior to the other sclerosing solutions. The blood within the vein was coagulated at the point of injection and for varying distances from this point.

Moru-quin produces an aseptic irritation of

the endothelium of the intima. The clot becomes organized and with the sclerosed vein walls changes into a fibrous cord. Sections have been taken on several cases six months later and in two cases there was no evidence left of the fibrous cord. Because of the inflammation accompanying the coagulation, the clot formed is strongly adherent to the vessel wall, and no embolism results. The vein becomes permanently obliterated, more so than with other agents. I have seen veins injected with the other sclerosing agents mentioned, that were thrombosed later to become canalized by the back pressure of the heavy column of blood. This has not occurred with moru-quin. Within a few days after the injection of moru-quin, the course of the vein may be palpated as a firm cord, about one-third of its former size. The skin over the vein may take on a light brown cast because of the inflammatory process, which involves the vein and deeper layers of the skin. The latter hue disappears in a week. Moru-quin causes a minimum of local reaction as described above.

The author has not seen severe local reaction or sloughing following accidental injection of moru-quin outside the vein.

MULTIPLE INJECTIONS

A succession of injections can be made with moru-quin spaced out over intervals of one to two inches. After each injection the needle is withdrawn and the puncture momentarily compressed. Escape of blood ceases rapidly as the vein swells.

When the series of injections for one treatment has been made, the punctures are covered with gauze and adhesive. No further application or dressing is necessary. The dressing can be removed in 48 hours. A total dosage of up to 24 cc. of the 5 per cent solution has been given at one sitting. In most cases one cc. was injected at each puncture, the length of vein treated depending upon its size and the condition of the patient. With correct dosage and spacing of punctures, periphlebitis will be rare and obliteration of the vein is obtained with the minimum of discomfort. The patient can return in three days and take more injections.

In cases complicated by an ulcer or eczema, injections should be given into the varix that is keeping this area engorged with venous blood. The varices in such cases are often found distal, proximal, medial, or lateral to the ulcer. In some cases the varices are often hidden by the thickened tissues and are at times most difficult to locate. If the leg is raised and the vessels emptied of blood, the varix may be palpated, as a deep channel between the scar tissue walls. Injections should be made well distal to the infected ulcer in order to avoid a septic thrombus. The healing of the ulcer or eczema will depend on the ability of the operator to find and inject the offending varix or feeder.

The healing is accelerated if the patient is able to keep the leg elevated for the greater part of the day. Large hidden varices in the floor of the ulcer, or in the surrounding induration should be brought into view by increasing venous pressure, by patient standing with full weight on the foot.

TREATMENT OF ECZEMATOUS AREAS

By palpation of an eczematous area, one may detect the veins at fault, and such veins should be sclerosed.

Before concluding, it would be well to mention the treatment of post-phlebitic and luetic ulcers with autogenous blood.[3]

These ulcers are first treated by a few days rest in bed with the limb elevated. Warm, mild, antiseptic wet dressings are put on for 20 minutes three times a day. After cleaning with alcohol, 1 or 2 per cent tincture of iodine solution is painted over the injected area. A ten cc. Luer syringe with a 23 or 24 gauge needle, one to one and one-half inches long is used. About ten cc. of blood is taken from the veins at the bend of the elbow and immediately injected one-fourth of an inch inside of the ulcer margin. One or several injections are given, one-fourth to one-half inches apart depending on the size of the ulcer. The needle must be inserted beyond the resistant fibrotic ring.

It is advisable to anesthetize the area injected with 2 per cent novacain solution. Treatment is repeated once a week until healing begins. Dressings are done every two days, cleaning ulcer with alcohol, then applying aqueous solution of gentian violet, 5 per cent. Healed scars following this treatment are very strong.

In a few stubborn varicose ulcers that would not heal by sclerosing the veins, autogenous blood was injected in the ulcers and they healed in a short time.

By injecting patient's whole blood inside the margin, into the surrounding subcutaneous tissue, the fibrotic ring which surrounds the ulcer and cuts it from the normal blood supply, is broken up. This permits the formation of new granulation tissue, rich in new blood vessels. New vascular tissue begins to fill the gap, with many fibro-blasts and callagin fibrils which arrange themselves at right angles to the vessels. Marginal epithelial cells then proliferate and grow over the young tissue. Emigration of polymorphonuclear leukocytes stops, devascularization begins, collagin fibers are formed, and the tissue becomes dense, fibrous and comparatively avascular, characteristic of cicatrization.

In conclusion, in a comparison of various sclerosing solutions used in the injection treatment of varicose veins and ulcers, the combination of

sodium morrhuate, 5 per cent, and alkaloid quinine 2 per cent, comes the nearest of being an ideal solution by meeting the ten requirements mentioned.

7113 EUCLID AVENUE.

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DISCUSSION

Eslie Asbury, M. D., Cincinnati, Ohio: We have read Dr. Verovitz's conclusions with interest and in a general way our experience is in agreement. We have treated in private and dispensary practice about 1600 patients during the past ten years. After using the various sclerosing solutions, we have now confined ourselves to quinine urethane and sodium morrhuate. The quinine urethane is used in the larger veins and the sodium morrhuate is used in the smaller veins. When the long saphenous vein is prominent above the knee, high ligation is practiced. Ligation is also at times necessary in the region of a large venous lake associated with the largest type of varicosities, particularly if there has been a lot of previous inflammatory condition with subsequent scarring of the soft tissue and thickening of the vein walls. Sclerosing solutions alone will not obliterate this type of vein unless large amounts of solution are used. We feel that there is a definite danger in a large amount of solution at one sitting and we limit ourselves to three cc. of sodium morrhuate or two cc. of quinine urethane. We have had no sloughs for several years but there is a definite danger of troublesome shallow sloughs if too much solution is used in the small veins, particularly the spider-bursts. The small veins are the hardest to obliterate. In our experience the best method is to use only sodium morrhuate foam produced by shaking the solution vigorously in the syringe. Our experience with moru-quin has been very limited. In general it has been satisfactory but we still feel that the utmost precaution against sloughing should be used with any solution.

Atonic Postpartum Hemorrhage

With chloroform anesthesia, and before the days of pituitrin and better standardized preparations of ergot, this was a real factor to be dealt with, and even today this form of hemorrhage is still responsible for quite a number of deaths.

There are three factors which normally control bleeding in the uterus:

1. The contractions of the uterine muscular fibers.
2. The retraction of the uterine muscle fiber.
3. The clotting which occurs in the vessels.

The contraction of the muscular coat of the uterus brings about a temporary cessation of hemorrhage during their occurrence. Each fiber diminishes in length and as a result the whole organ becomes a firm, hard mass, and its supplying arteries are compressed as soon as the contraction passes off, and it only lasts a very short time; the uterine fibers lengthen; the compression of the vessels ceases and hemorrhage would begin again if another factor quite distinct from the contraction, but in a manner dependent upon it, did not also occur. This factor, which is the most potent agent, is causing the permanent cessation of hemorrhage, is the retraction of the uterine muscle fibers.

Retraction brings about a reduction in the size of the uterus sufficient to cause a permanent kinking and compression of the placenta vessels. It is, therefore, the process to which the final and permanent checking of hemorrhage is due.

The clotting which occurs in the vessels is so unimportant a factor in checking hemorrhage that it may almost be neglected. It may be the direct cause of the cessation of hemorrhage in some small vessels, but it is probably more correct to consider it a result rather than a cause of the cessation of hemorrhage.

These are the normal agencies by which hemorrhage is prevented, and in knowing them, we can better understand the conditions which favor hemorrhage, conditions which prevent the due retraction of the uterine muscle fibers either directly as a retained placenta, or indirectly by preventing contraction from taking place, like degeneration of the fibers from pathological conditions as in the toxemias of pregnancy. Abnormal adherence of the placenta to the uterine wall, with partial separation, causes the worst form of uterine hemorrhage.

TREATMENT

Treatment is both prophylactic and curative. Ideal obstetrics demands that no woman should lose enough blood to give rise to symptoms of anemia. Under the heading of prophylactic treatment, I would like to suggest to all health authorities who are granted the privilege of issuing permits for operating maternity departments that they make a careful inspection of delivery rooms, labor rooms, nurseries, and the department in general, to see that they are properly equipped for handling obstetrical emergencies, and especially accidents that happen during labor. The help needed must be rendered at once and does not permit of delay and especially is this so in the hemorrhage cases.

Every delivery room should have proper instruments, such as vaginal retractors and speculi, and emergency kits, sterilized and ready for use. The head of the obstetrical department or other responsible persons should make routine inspection to see these needs are provided for.—Clarence A. DePuy, M.D., Oakland, Calif.; California and Western Medicine, Vol. 47, No. 4; Oct., 1937.

Before considering a diagnosis of brain tumor, remember that life itself is the commonest cause of headaches.—Fetterman.

SYSTEMATIC OUTLINE COVERING DIAGNOSIS AND TREATMENT OF THE MORE COMMON BLOOD DYSCRASIAS

By LOWELL ASHTON ERF, M.D., New York City

BLOOD consists of the formed elements, (the red blood cells, the white blood cells and the platelets or thrombocytes) and plasma. Hematology deals with changes in the formed elements, such as too few red cells (anemia), too many red cells (polycythemia), too few white cells (leucopenia), too many white cells (leucocytosis), too few thrombocytes (thrombopenia) or too many thrombocytes (thrombocytosis), in addition to or associated with changes in the plasma constituents and the capillaries. To simplify the understanding of hematology, the majority of the dyscrasias may be classified with reference to such changes according to the following general outline.

1. Formed element changes.

Red Cells	too few	physiological
		pathological (either primary or secondary)
	too many	physiological
		pathological (either primary or secondary)
White Cells	too few	physiological
		pathological (either primary or secondary)
	too many	physiological
		pathological (either primary or secondary)
Platelets	too few	physiological
		pathological (either primary or secondary)
	too many	physiological
		pathological (either primary or secondary)

2. Plasma Changes.

3. Capillary Changes.

These changes (formed element, plasma, and capillary), are frequently secondary to changes in the bone marrow, lymphatic system, reticulo-endothelial system, spleen, liver, general nutrition, body water balance, endocrines, heredity and even trauma and emotions. Thus, hematology overlaps into other fields, such as, gastro-enterology, neurology, nutrition, osteology, radiology, endocrinology, etc.

There are not many therapeutic agents that influence the formed elements, plasma and capillaries, but the general practitioner should be acquainted with such therapeutic armamentaria as iron, liver, yeast, proteins, arsenic, snake venom, placental extracts, nucleotides, adrenaline, vitamins B, C, and P, calcium, parathormone, acetyl phenylhydrazine, heparin, transfusions, phlebotomy, splenectomy and irradiation, in order to effectively advise his patients. This, of course, requires first a knowledge of the hematological standards for healthy persons[1].

The following is a simple schematic guide for the diagnosis and treatment of some of the hematological disturbances. The diagnostic and therapeutic details can be found by referring to the recent significant references cited; the majority having been published within the last two years. An attempt was made to use references in the more readily accessible medical journals in the English language, so that little trouble will be encountered in obtaining the original article by any interested physicians.

Submitted October 25, 1937.

The Author

Dr. Erf is a graduate of Ohio State University College of Medicine, 1931; resident in medical research, Ohio State University, under Dr. C. A. Doan, 1932-1934; assistant in hematology at Mt. Sinai Hospital, New York City, under Dr. N. Rosenthal, 1934-1936; director of hematological research, Jewish Hospital, Cincinnati, 1936-1937; assistant in Rockefeller Institute for Medical Research, New York City under Dr. C. P. Rhoads.

Classification	Diagnosis	Treatment
FORMED ELEMENT CHANGES		
RED CELLS		
I. Too few (Anemia)		
A. Physiological	There are a very few individuals who normally have a red cell count less than the accepted normal figures. These individuals are accommodated to the low red cell count and have no symptoms relating to it.	1. No treatment
B. Pathological		
1. Macrocytic Anemias		
1¹. Primary		
a. Lack of specific anti-anemic factor		
a¹. Due to failure of manufacture in the stomach.		
(1) Pernicious Anemia	1. **Symptomatic Diagnosis.** Usually the patient appears to be well nourished, but has a lemon-tinted pallor, a smooth sore tongue, and complains of muscular weakness, tingling and in severe cases paralysis of extremities, (combined sclerosis). 2. The blood count reveals an anemia, a leucopenia and a high color index. The red cells are large—macrocytosis. There is an absence of free hydrochloric acid in the stomach contents, even after histamine. Frequently there is a lack of vibratory sense present. The sternal puncture or biopsy is quite diagnostic. A marked increase in the number of megaloblasts is present (2) (3) (4) 5). 3. **Therapeutic.** After liver extract injections a reticulocytosis appears in four or five days (the peak in ten days); the megaloblastic marrow becomes first erythroblastic then normoblastic in four or five days, the red blood cells increase in numbers followed by a hemoglobin increase in the peripheral blood.	1. Liver and Stomach Extracts are specific. Adequate amounts (6) are preferred; 2 cc. (100 grams liver per cc.) of liver extract daily at first until the maintenance dosage can be determined. The effective principle in liver extract is still unknown (7). 2. Iron is unnecessary. Pernicious anemia patients have high plasma iron (5) (5a). 3. Transfusions in emergencies. 4. Dilute hydrochloric acid and pepsin is helpful. 5. Adequate diets; particularly are proteins necessary. 6. Congo Red is ineffective (7a).
b. Lack of specific anti-anemic factor associated with other conditions.		
a¹. Due to failure of manufacture in the stomach.		
(1) Pernicious Anemia of Pregnancy	1. The diagnostic findings are very similar to those given above. Vomiting may be an additional complaint.	1. Recovery occurs after pregnancy terminates (spontaneous or induced). 2. Liver extract is specific (8). 3. Good diet. Frequent small high protein meals (9) (9a).
(2) Neoplasm of the Stomach (Fibroma, Carcinoma, etc.) Gastrectomies rarely (10)	1. The macrocytic anemia here is accompanied by emaciation, loss of weight, gastric symptoms, such as pain or bleeding, etc. Gastro-intestinal X-ray examinations and gastroscopic studies are definite aids in establishing diagnosis.	1. Surgery. 2. X-ray or radium. 3. Liver extract and a good diet are occasionally helpful.

b^1. Defective absorption of specific anti-anemic factor.		
(1) Sprue (Idiopathic Steatorrhea or Gee-Thaysen disease).	1. In these cases the macrocytic anemia is accompanied by emaciation, rapid loss of weight, weakness and foamy ill-smelling frequent stools. 2. The diarrhea stools have 25% to 40% fat. The patient has a low or "flat" sugar tolerance curve and low blood calcium and blood phosphorus findings.	1. Liver extract is specific (11) (12). 2. Vitamin B (13). 3. Bland non-irritating diet. High protein, low fat and carbohydrate diet.
(2) Prolonged diarrheas	Macrocytic types of anemia are not infrequent in the severe bacterial or protozoal intestinal invasions, nor in individuals with polyposis. The diagnoses of these conditions depend upon stool examinations, stool cultures, and X-ray and proctoscopic examinations. Microcytic anemias are more common in these conditions, however.	1. Repeated transfusions (16) (16a) 2. Intravenous saline and glucose. 3. Bland diet. 4. Ultra violet ray helpful at times. 5. Rest. 6. Cod liver oil enemata. 7. Kaolin and aluminum hydroxide.
Ineffective storage, mobilization or utilization of specific anti-anemic factor.		
(1) Cirrhosis of liver, and liver disturbances (17) (18)	Macrocytic anemia is not uncommon in liver cirrhosis, particularly in the late stages. Besides the anemia, the patient usually exhibits a firm rough liver, associated with ascites; and complains of weakness. The Takata-Ara test may be helpful (19).	1. Liver extract is helpful. 2. Glucose, by mouth and by vein.
d^1. Inadequate amounts of specific anti-anemic factor.		
(1) Pellagra (lack of specific anti-anemic substance due to poor diet or chronic alcoholism (14)	A macrocytic type of anemia occurs in some of these cases. They exhibit diarrhea, dermititis (glove and shoe type of lesion is common) tongue ulcers, emaciation and occasionally dementia.	1. Yeast (Vitamin B) in large quantities. One or two ounces daily (15). 2. Liver extract. 3. Forced feedings or at least a good adequate diet.
2^1. Secondary macrocytic anemia with associated diseases probably not related to inadequate amounts of anti-anemic factor, as in Dibothriocephalus Latus infestations, Malaria, oroya fever, (Bartonella) lead poisoning, occasionally in leukemia Hodgkin's disease, metastatic carcinoma, hemolytic jaundice and myxedema (20) (20a).	The associated conditions are diagnosed by finding ova in stools, malarial organism in the blood, stippled cells in the blood, marrow puncture or biopsy, gland biopsies, red cell fragility tests, and basal metabolic tests, etc., in association with the clinical course.	1. Treatment of the primary or associated condition is necessary before a change in the macrocytic anemia is possible. In myxedema, thyroid extract is necessary. Iron and liver play a very small role (20a) in overcoming the anemia.
a. Leuko-Erythroblastic anemia (21) usually secondary to carcinomatosis, myelomatosis, myelosclerosis, etc.	This condition is rather rare and is characterized by the discovery of immature red and white cells in the peripheral blood stream. A macrocytosis is found occasionally.	1. Treat primary diseases. 2. Transfusions. 3. Liver extract rarely alters the macrocytosis.

CLASSIFICATION	DIAGNOSIS	TREATMENT
FORMED ELEMENT CHANGES		
RED CELLS—Continued		
2. Microcytic Hypochromic Anemias		
1¹. Primary or Idiopathic type. Chlorosis which is a nutritional lack of iron and the Plummer-Vinson Syndrome (dysphagia and secondary type of anemia) (22) (23) are usually included here.	This type of anemia is characterized by small red cells—microcytes; or by normal sized cells containing too little hemoglobin. These patients complain of pallor, weakness, dysphagia, frequent infections, dry brittle finger nails, dyspnea, fatigue, indigestion, gas, etc. There is no neurological involvement. Gastroscopic studies may be helpful (24).	1. Iron is specific (25-31). It should be given in adequate quantities. Reduced iron, Blaud pills, Ferric and Ammonium Citrate (an example dosage would be 90 to 120 grains daily—if tolerated) and Ferrous gluconate (which is supposedly one of the least toxic of iron medications (32), are some of the common preparations. 2. Copper, bile, manganese chlorophyll (33) and liver extract (34) are helpful only in exceptional cases. 3. Dilute hydrochloric acid and Glycerinated pepsin will help control diarrhea due to iron medication in some cases.
2¹. Secondary (to some associated condition) type. a. Anemia due to blood loss or hemorrhages, (gastric ulcers, purpuras, menorrhagias, trauma, intestinal worms, surgery, etc.) b. Anemia due to blood destruction. a¹. Chemicals (benzene, lead, poisons, saponin, etc.) b¹. Infections and infestations (Streptococcic and Staphlococcic infections, tuberculosis, syphilis, malaria, hookworms, etc.) c¹. Irradiations (X-ray radium, etc.) d¹. Hemolytic Paroxysmal Hemoglobinuria, hemolytic anemia, transfusion reatcions, etc.) c. Anemia due to nutritional deficiencies,—poor diet, alcosolism, gastro-intestinal and liver dis-	The diagnosis as is evident from the classification depends upon a careful history, physical examination and laboratory work-up.	1. Must treat the primary cause first. If iron stores are depleted, as in chronic infections, iron is indicated. If the patient is myxadematous, thyroxine and iodine are indicated. If malnutrition is evident, a good nutritious diet is indicated. 2. Poisons, industrial or otherwise, should be eliminated. 3. Splenectomies in some of the industrial poisons (which accumulate in the spleen) must be selectively considered (9a).

turbances, avitaminoses (scurvy, beri-beri) lack of iodine in diet, etc.

d. Anemia due to toxic or mechanical damage to blood forming organs, nephritis and nephrosis (35) chronic sepsis, osteomyelitis, tuberculosis, intestinal worms, (hookworms) burns, syphilis, malignancies, leukemia, Hodgkin's disease, Gaucher's disease, myeloma, reticulo-endothelial disturbances, etc.

3'. Anemia of Infants (36).

a. Due to defect in nutrition.

a¹. Poor diet.

b¹. Constitution.
Mothers in Copenhagen have offsprings that rarely are anemic, while mothers in London have offsprings that frequently are anemic (37).

b. Due to infections (especially diarrheas) which are often associated with lack of minerals, organic elements or food accessory elements.

c. Due to abnormal hemolysis.

d. Secondary to the pathological processes described above for adults—also

a¹. Erythroblastosis of the newborn (43)

(1) Anemia of new-born.

(2) Familial Icterus Gravis.

(3) Universal fetal hydrops.

b¹. Cooleys Anemia (Erythroblastic anemia . Thalassemia or Mediterranean anemia (46)

In infants, anemia is frequent. The hemoglobin and red cell may be lower than the clinical picture would indicate. Infants with hypochromic anemia are pale and weak, listless and irritable, and frequently lose weight and are susceptible to infections. The spleen may be enlarged rarely. A sternal puncture reveals a diminished number of erythropoetic cells (37a).

This condition, with its subdivisions listed in the degree of severity in the classification, is diagnosed by pallor, jaundice, edema, twitchings, convulsions, hepatosplenomegaly, hemorrhages, anemia, reticulocytosis and erythoblastosis. A family history is usually present (44).

This disease is a progressive severe hypochromic anemia with erythroblastosis that occurs in children of Mediterranean people. The onset usually occurs before the second year of life and is gradual. The liver, spleen and lymph nodes gradually enlarge. Characteristic roentgenograms of the bones appear during the disease process. The disease is supposedly familial. Some feel that the disease is a form of chronic malaria (46a).

1. It is best to prevent anemia in infants by giving gravid mothers plenty of iron (38) (39) (40) (41) (5a).
2. Adequate amounts of iron should be given to the infants.
Ten grains of Ferric and ammonium citrate daily, or 3 grains reduced iron daily, or 3 grains saccharinated iron daily, or Ferric pyrophosphate (25 mg. iron with 1 mg. copper—as suggested in (42)), are the usual dosages.

1. Transfusions are frequently helpful and sometimes curative (45).

1. Transfusions are indicated, but the disease is always fatal.
Many types of therapy have failed (46).
2. Quinine (46a) is apparently helpful in some cases.

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Classification	Diagnosis	Treatment
FORMED ELEMENT CHANGES		
RED CELLS—Continued		
c[1]. Von Jaksch's anemia	This process sometimes referred to as pseudo-leukemia is characterized by anemia, edema, hepatosplenomegaly, lymphadenopathy with immature red and white cells in the blood stream. This condition might likely be a nutritional deficiency, and is not always fatal.	1. Transfusions 2. Liver extract 3. Yeast
d[1]. Aregenerative Anemia (1) Congenital absence of the marrow. (2) Congenital fibrosis of the marrow.	A severe anemia, leucopenia and thrombopenia which fails to respond to the types of treatment in existence today.	1. Repeated transfusions will stay the fatal termination for varying periods.
3. Hemolytic Jaundice	This disease is nearly always familial and is characterized by pallor, weakness, jaundice (chronic and recurring) splenomegaly and an anemia with decidedly small red cells (occasionally there are rare cases with macrocytosis), reticulocytosis and an increased red cell fragility. A sternal puncture or biopsy reveals many normoblasts and is nearly specifically diagnostic therefore. (The ratio of nucleated red to white cells in the normal bone marrow is 1:2 but in hemolytic jaundice it may be 3.1 or even greater).	1. Splenectomy is specific. (The spleens in these cases contain an overactively destructive reticulo-endothelial system for red blood cells) (47) (48). The marrow returns to the normal state after splenectomy.
4. Sickle cell anemia (49)	This type of anemia occurs most frequently in the colored race but not always (50) (51). It is characterized by weakness, frequent chronic leg ulcers and either a very large spleen or very small spleen (15 grams). The red cells in a wet preparation particularly in a carbon dioxide atmosphere, will become crescent or sickle shaped. The bone marrow is normoblastic as in hemolytic jaundice.	1. Transfusions. 2. Splenectomy in the cases of splenomegaly is sometimes curative (50) (52).
5. Lederer's Anemia and Hemolytic Anemia (53, (53b), (53c)	The first is an acute and the second a chronic type of anemia, occurring with pallor, temperature, weakness, splenomegaly, high blood sugar, reticulocytosis occasionally normoblasts and frequently a leucocytosis. The onset in Lederer anemia is very acute.	1. Transfusions are specific (53a) (54). For Lederer's anemia. 2. Rule out Favism and poisons in chronic hemolytic anemia.
6. Aplastic Anemia (55) 1[1]. Primary 2[1]. Secondary to benzol, arsenic, radium X-ray radiation, phosphorus, lead, etc.	This is a chronically progressive type of anemia with an accompanying leucopenia and thrombocytopenia; with the symptoms of severe anemia (pallor, weakness, dyspnea) and frequently splenomegaly. The primary type is always fatal.	1. Repeated transfusions and splenectomy (56) (5) (9a). 2. Nucleotides usually fail. 3. Intra-osteal injections of tar (56a).
II. Too Many (Polycythemia)		
A. Physiological	There are a very few individuals who normally and asymptomatically have increased numbers of red blood cells in the peripheral stream.	1. No treatment.

B. Pathological		
1. Primary polycythemia (Vaquez-Osler disease)	This is a very chronic disease with a gradual insidious onset. These patients are florid (characteristic red palms of the hands), complaining of vague pains (particularly legs and feet) headaches, drowsiness, weakness, tingling and transient paralyzes and splenomegaly. Thromboses are common. The blood is, visibly, very viscid. The red cell count may be from 5,000,000 to 12,000,000, associated with a leucocytosis and thrombocytosis while the differential shows an eosinophilia and an occasional myelocyte. The blood volume is high (normal is 80-100 cc. of blood per kilo. of body weight). The blood uric acid is high and the basal metabolism is frequently increased. Sternal puncture reveals relatively normal marrow findings. The marrow biopsy shows hyperplasia and thickened vessels (57) (58). The marrow is hyperactive and hyperplastic in most of the bones of the body.	1. Phlebotomy (59); withdraw 500 cc. of blood as often as is needed to maintain red count at five million. 2. Acetyl-Phenyl-hydrazine (600 mg. over a period of one week, then rest two weeks and repeat if necessary). 3. X-ray therapy (destructive dose to all the long bones). 4. Potassium arsenite (60) (1 to 10 drops of Fowlers solution daily—governed by blood count, symptoms and tolerance). 5. Thyroidectomy (61).
2. Secondary to,		
1¹. Gaisbock type of polycythemia is one that is associated with hypertension.	The diagnosis of these secondary polycythemias depend upon a good history and careful physical and roentgenological examinations.	1. Treat primary diseases.
2¹. Bronchitis or sclerosis of the pulmonary vessels (62)		
3¹. Congenital atresia of aorta and syphilis of the pulmonary artery (Ayerza's disease) or congestive heart disease.		
4¹. Tuberculosis of the spleen and occasionally pulmonary tuberculosis.		
5¹. High altitudes.		

CLASSIFICATION	DIAGNOSIS	TREATMENT
FORMED ELEMENT CHANGES—(Continued)		
WHITE CELLS		
I. Too Few (Leucopenia)		
A. Physiological	Leucopenia occurs normally in some individuals; and such individuals have a normal response during infection (63). A leucopenia is found occasionally in older women; they complain of weakness	1. Nucleotides are helpful (5) (63). 2. Endocrine preparations according to symptoms are helpful. Sex hormones, thyroid, vitamine and nutritional therapy are selectively advocated.
B. Pathological		
1. Agranulocytosis		
1¹. Primary or idiopathic		

Classification	Diagnosis	Treatment
FORMED ELEMENT CHANGES—(Continued)		
WHITE CELLS—Continued		
a. "Fatal" agranulocytosis (with relative lymphocytosis).	This is usually an acute disease characterized by extreme weakness, mouth lesions, temperature; no anemia but severe leucopenia (often less than 1000 white blood cells). Doctors and nurses seem more susceptible than other individuals. Sternal punctures or biopsies reveal either a hyperplastic myeloblastic marrow (67) (simulating an acute myeloblastic leukemia) or a hypoplastic marrow. The majority of the peripheral white cells are lymphocytes.	1. Removal of offending drugs. 2. Repeated transfusions (68). 3. Nucleotides. Some feel that 40 cc. of pentnucleotide given intramuscularly daily helps (69) while others do not (70) (71). 4. X-ray therapy is dangerous. 5. Mouth washes (68). 6. Good nursing care is important.
b. "Benign" agranulocytosis (relative monocytosis) or leucopenic infectious monocytosis (72).	The onset of this condition may be acute or slow. The patients complain of profound weakness and usually have lymphadenopathy. The leucopenia is severe but the differentiating feature is that the majority of peripheral white cells are monocytes. "Monocytic" agranulocytosis is not as fatal as "lymphocytic" agranulocytosis.	1. Removal of offending drugs. 2. Transfusions in emergencies. 3. Symptomatic treatment.
2¹. Secondary to	The onset of this condition is slower but symptoms and findings are similar to those described above.	1. Treat the primary cause. Eliminate poisons and stop radiation therapy. 2. Transfusions in emergencies.
a. Poisons (amidopyrine, arsenic, dinitrophenol, etc.)		
b. Severe infections (Streptococci, Staphlococci and Friedlanders septicemia (73)).		
2. Fibrosis of the marrow.	A rather rare disease characterized by a progressive anemia, weakness and hepatosplenomegaly. The patient complains of fatigue and the predominating and characteristic bone pains (long bones and lumbar regions). About 50% of the cases have roentgenological changes in the bones—irregular rarefactions and condensations of vertebrae, pelvic bones and long bones. The blood picture reveals an anemia, thrombocytopenia and leucopenia with 5% to 10% immature (usually myelocytes) white cells in the peripheral blood. Biopsy of bone marrow reveals islands of fibrosis alternating with islands of hyperactive myelopoiesis.	1. Transfusions—repeated. 2. Symptomatic.
1¹. Myelosclerosis or Myelofibrosis (74)		
a. Primary		
b. Secondary		
a¹. Chronic infections		
b¹. Irradiations.		
c¹. Malignancies as metastatic carcinomatous lesions of thyroid and prostate to skeletal system.		
2¹. Albers-Schoenberg's disease (or Marble Bone disease, or osteopetrosis or osteosclerosis fragilitas) (75)	A familial disease characterized by frequent fractures, a uniformly marked density of all bones roentgenologically, optic atrophy, anemia, leucopenia and thrombocytopenia. A biopsy of the bone reveals a thickened sclerotic bone with areas of marrow fibrosis.	1. Transfusions 2. Symptomatic
3. Secondary to Leucopenia	Secondary leucopenias are common yet not understood. The diagnosis of the primary causes depend upon a good history, good physical examination and biopsies. Leukemia, Gaucher's disease	1. Treat primary disease; some have specific treatment as syphilis, tuberculosis, etc.
1¹. Poisons (Benzol, Phosphorous Lead, Arsenic, etc.)		

2^1. Irradiations (64). During prolonged X-ray treatments in malignancies, syringomeglia, etc.	(65) myeloma (66) and generalized Xanthomatoses frequently can be specifically diagnosed by sternal puncture.	2. Transfusions as needed. 3. Nucleotide therapy occasionally helpful. 4. Splenectomy in such conditions as Gaucher's disease, Banti's disease, Felty's syndrome, etc., is frequently accompanied by symptomatic improvement. 5. Symptomatic treatment. 6. Removal of offending poisons or drugs.
3^1. Associated diseases as, Measles, influenza, typhoid fever, tuberculosis, syphilis, leukemia (aleukemic or subleukemic types) myeloma, Hodgkin's disease, Gaucher's disease, Hans-Schiller-Christian disease, Niemann-Picks disease, Banti's disease, Felty's syndrome, etc. (See also Reticulo-endothelial hyperplasia II 3).		
II. Too many (Leucocytosis)		
A. Physiological Leucocytosis or Polynucleosis	Usually no symptoms.	1. No treatment.
B. Pathological		
1. Infectious Mononucleosis (Glandular Fever) (A leukemoid reaction to an infectious toxic lymphotropic agent (79).	This is an acute infectious condition usually found in young adults characterized by generalized tender lymphadenopathy, fever, malaise, weakness, sore throat and occasionally a diffuse toxic erythematous rash. The leucocytosis is caused by an increase in an atypical yet specific type of lymphoid cell in about 80% of the cases. The heterophile antibody reaction is positive in approximately 60% of the cases and nearly 100% of the cases if absorption tests are included (80) (81). The antibody reaction will remain positive six months to one year after acute symptoms in rare instances.	1. Symptomatic treatment.
2. Leukemias (28) (must be differentiated from a Leukemoid reaction). See 4, 3^1.	These various types of leukemias may be either, 1. Acute or chronic. (Three months is the usual dividing line). 2. Leucopenic or Leucocythemic (15,000 white blood cells, is the usual dividing line). About 40% of leukemias are leucopenic. 3. Associated or unassociated with invasiveness of tissues. (tumor formation). The symptoms complained of in the leukemias are due to, 1. Infiltration of tissues with immature white blood cells, causing tissue suffocation. (Heart, liver, kidneys, spleen, glands, etc.) 2. Enlarged lymph glands causing pressure symptoms on vital organs. 3. Depression of hemoglobin. Thus, the symptoms of weakness, dyspnea, pains, swellings, skin lesion, and pallor, can be rationalized. Hepatosplenomegaly, generalized lymphadenopathy, increased basal metabolism, purpura (thrombocytopenia) and anemia are present too. The peripheral blood count and the sternal puncture are the usual diagnostic procedures. Bone marrow studies will diagnose the true aleukemic leukemias (no immature white cells in the peripheral blood stream) which are rare.	1. Transfusions (92). 2. X-ray (93). X-rays are dangerous in acute leukemias. Prevent X-ray sickness by glucose, insulin, adrenaline, liver extract, etc. 3. Fowlers Solution (94.) (1 to 10 drops daily governed by the blood count and symptoms).
1^1. Myeloid		
a. Chloroma (myeloblastic leukemia with 'green tumor' formation).		
2^1. Lymphoid		
a. Lymphatic leukemia, lymphocarcoma, leucosarcoma, Giant follicular Lymphoblastoma and Hodgkin's disease show a relationship (83) (84).		
3^1. Monocytoid (85) (86) (87) (88)		
a. Mixed type		
a^1. Naegeli type (myeloblastic origin)		

CLASSIFICATION	DIAGNOSIS	TREATMENT
FORMED ELEMENT CHANGES—(Continued)		
WHITE CELLS—Continued		
b[1]. Doan et al. Primary monocytic, with secondary myeloid and lymphoid reactions (a left shift of all white elements) (88).		
b. Schilling type (reticulo-endothelial origin).		
4[1]. Eosinophilic (89)		
5[1]. Basophilic (90)		
6[1]. Plasma cell (91)		
3. Reticulo-endothelial hyperplasias (95) (96)	The diagnoses of the infectious reticulo-endothelioses usually depend on skin tests (tuberculin skin test, undulant fever skin test, Frei test) biopsies, X-ray examinations, clinical course, blood picture, etc. The diagnoses of the metabolic reticulo-endothelioses usually depend on biopsies, X-ray changes in the bones, clinical course (usually progressive degradation), hepatosplenomegaly, weakness, anemia, temperature, etc. The diagnosis of the leukemic type is similar to that mentioned above under leukemia. In general the symptoms of weakness, pallor, and fatigue are common to all reticulo-endothelial hyperplasias. Repeated blood counts, roentgenological bony changes, lymph node and marrow biopsies are usually necessary for a diagnosis.	1. Transfusions. 2. Supportive treatment. 3. Splenectomy in such cases as Gauchers disease, Hodgkin's disease, etc. 4. Rest for tuberculosis. 5. Specific treatment for undulant fever, lymphogranuloma inquinale, etc.
1[1]. Infectious (Tuberculosis, brucellosis, Hodgkin's disease, lymphogranuloma inguinale, etc.)		
2[1]. Metabolic (Gaucher's disease, Niemann-Picks disease, Hans-Schiller-Christian's disease, Xanthomatoses (97), Letterer-Siwe's disease (98)).		
3[1]. Aleukemic (aleukemic monocytic leukemia). 1[1], 2[1], and 3[1] usually have leucopenic peripheral blood counts.		
4[1]. Leukemic (monocytic leukemia). This has a leucocythemic peripheral blood count.		
4. Secondary to Leucocytosis	The primary cause of the leucocytosis is determined by the history and physical examination, clinical course and laboratory findings.	1. Treat the primary cause.
1[1]. Infections (most infections (Staphylococcus, Streptococcus, coli, etc.) except tuberculosis, typhoid fever, etc., are accompanied by a leucocytosis).		
2[1]. Some of the rarer atypical infectious conditions as, Periarteritis Nodosa (76) (which is probably associated with rheumatic fever) is accompanied by a marked leucocytosis occasionally.		

3¹. Leukemoid Reactions, occur occasionally in severe infections (particularly pneumonia, tuberculosis, and peritonitis), after use of drugs, as mercury (77), after liver extract therapy (78) and atypical skin lesions (mycosis fungoides, etc.). The leukemoid reactions may be myeloid or lymphoid.

PLATELETS

I. Too Few (Thrombopenia)

A. Physiological

There are a very few individuals who asymptomatically have platelet counts lower than the accepted normal count.

B. Pathological

1. Primary (or idiopathic) Purpura Hemorrhagica (99) (100)

1¹. Fulminans type

2¹. Acute type

3¹. Chronic type.

Depending on the type, this disease may appear very acutely and fatally or rather slowly and insidiously. The patients complain of petechiae, ecchymoses and hemorrhages. They complain develop scurvy. Scurvy is characterized by generalized petechiae, gums, stomach, intestines, bladder, uterus, etc. A splenomegaly is frequently present. The blood findings are quite characteristic, diminished platelets, anemia, normal coagulation time, prolonged bleeding time, positive tourniquet test, positive pinch test and a positive prognostic venom reaction (101), and a poor clot retraction.

1. No treatment.
1. Transfusions (102) (103) (104).
2. Vitamin P (105) is indicated probably. Vitamin C is usually valueless in purpura hemorrhagica (106).
3. Snake Venoms (107) (108). Snake venoms, with their contained endothelial toxins, irritate the capillaries to proliferate and thus thicken and strengthen them. (99). If patient is not sensitive, 1 cc. of 1/3000 moccasin venom, given subcutaneously, two or three times a week until a maintenance dosage is established, is the initial treatment (99).
4. Splenectomy (5) (99) (100) (104).
5. X-ray therapy (109) (110). About 200 R units over the spleen every four days for three to six treatments).
6. Egg yolk and Sesame oil (Fat soluble T factor) (111).
7. Parathormone (40 units), and calcium gluconate 10 cc.—repeated. Helps in children occasionally (103).
8. Adrenaline helps occasionally in emergencies, but protein shocks, calcium, liver extract, ultra-violet rays, etc., usually fail.

2. Purpura Secondary to,

1¹. Drugs (Sedormid (112) Belladonnae neoarsphenamine (113), quinine (114) etc.).

2¹. Infections (Nephritis, Measles, typhoid fever, endocarditis, etc.).

3¹. Sensitivity to foreign proteins.

The symptoms, signs and findings in these secondary purpuras are similar to the primary purpuras, because of the thrombocytopenia caused by the primary disease (through toxins, mechanical damage, drugs, etc.) The diagnosis of the primary disease is dependent upon a good history and physical examination with the laboratory findings.

1. Treat the primary disease.
2. Removal of offending drugs.
3. Transfusions.
4. Adrenaline in some cases will help temporarily.
5. Egg yolk and sesame oil.
6. Symptomatic treatment.

Classification	Diagnosis	Treatment
FORMED ELEMENT CHANGES—(Continued)		
WHITE CELLS—Continued		
4[1]. Associated diseases as, aplastic anemia, leukemia, Banti's disease, Gaucher's disease, occasionally metastatic carcinoma, etc.).		7. Vitamin D and calcium helps occasionally in bleeding of jaundice cases. 8. Endocrine treatment in advocated cases.
5[1]. Hypertension and nitrogen retention.		
6[1]. Jaundice.		
7[1]. Endocrine disturbances (particularly in women).		
II. Too Many (Thrombocytosis)		
A. Physiological	Rarely an individual is seen with a high platelet count which is not responsible for any symptoms.	1. No treatment.
B. Pathological		
1. Primary thrombocytosis (115) or essential thrombophilia.	These individuals are without symptoms until suddenly a thrombus develops. The clinical symptoms depend upon the location of the thrombus and whether arterial or venous. The only positive laboratory finding is the increase in platelets in the peripheral blood stream. Some of these cases may be "burnt out" cases of polycythemia in which the thrombocytosis still remains, but the erythroid and myeloid changes have disappeared.	1. Surgery, i.e., removal of the thrombus (116). 2. Pavex, i.e., passive vascular exercise (117). 3. Destructive doses of X-ray to long bones. 4. Heparin (117a) injections.
2. Thrombocytosis Secondary to, 1[1]. Splenic vein thrombosis 2[1]. Splenectomy 3[1]. Polycythemia 4[1]. Occasionally leukemia (118) (119) etc.	The diagnosis of the primary condition depends upon a good history and physical examination with laboratory findings.	1. Treatment of the primary condition is essential. 2. Heparin (117a).

PLASMA CHANGES. (Hemorrhagic disorders not due to changes in the formed elements or in the capillaries, but probably due to plasmal deficiencies).

I. Hemophilia (120) (Bleeder's disease) probably due to a qualitatively or quantitatively inadequate Prothrombin (121).	This is a well-known hereditary disease found only in males characterized by prolonged hemorrhages after trauma (hematomata, contractures, joint ankyloses, etc.) due to prolonged coagulation time. The coagulation time may be one, two or three hours, yet after the blood does coagulate the retraction of the clot is fair. These patients usually have a normal bleeding time. The platelets may be slightly diminished, normal or increased in numbers.	1. Transfusions are the most reliable type of treatment. The subsequent measures are useful on occasions. 2. Intramuscular blood injections. (10 cc. of any non-syphilitic blood injected intramuscularly during an attack will sometimes slow the bleeding). 3. Egg albumin and Bromine (122). 4. Snake venoms (123). 5. Morphine and rest (absolute) are essential.

		6. In selected cases remove blood from joints and hematomas (124). 7. Placental Extracts (125). 8. Globulin Extracts (126). 9. Histidine (127) (128).
II. Pseudo-Hemophilia Hepatica (Fibropenia) (128a). Probably due to an inadequate fibrinogen, due to liver damages as in acute yellow atrophy, chloroform and phosphorus poisoning and occasionally in yellow fever and syphilis.	These individuals have hemorrhagic tendencies associated with liver damage and reduced fibrinogen in the plasma. Both bleeding and coagulation times are usually prolonged. Platelets are normal.	1. Fibrinogen. 2. Transfusions. 3. Calcium. (Either gluconate chloride or lactate). 4. Liver extracts. 5. Glucose.
III. Hereditary Pseudo-Hemophilia (Thrombosthenia) Probably due to inadequate platelet activity.	These individuals (males and females) have chronically recurring purpuric attacks not related to any known changes. The prolonged bleeding time is the only positive finding. The platelets are normal in numbers but apparently not in quality. The disease is hereditary in character.	1. Intra-muscular whole blood (129). 2. Transfusions.
IV. Anaphylactoid Purpura A. Schonlein's type—purpura with joint involvement. B. Henock's type—purpura associated with gastro-intestinal hemorrhages.	In these two types of purpura the platelets are normal in number. The complaints are purpura, joint pains (Schonlein), intestinal cramps and hemorrhages (Henock) localized edematous areas and fever. In most cases, the condition is due to food or bacterial sensitivity.	1. Food sensitization tests (130) and the removal from the diet, foods that are responsible for the sensitivity. 2. Removal of foci of infection. 3. Rest and symptomatic treatment.
V. Scurvy (Barlow's disease) Probably lack of Vitamin C.	Scurvy is usually found only in infants in the present age, since children and adults ingest Vitamin C (in fruits and vegetables) in large quantities. Occasionally an adult on an ulcer diet will develop scurvy. Scurvy is characterized by generalized petechiae, tender sub-periosteal hemorrhages (roentgenologically evident), nose bleeds, anemia and weakness. Platelets are usually diminished moderately in numbers.	1. Vitamin C (131). 2. Good Nutritional diet. 3. Iron and liver extract are unnecessary.
CAPILLARY CHANGES. (Hemorrhagic disorders not due to changes in the plasma or formed elements but probably due to changes or abnormalities of the capillaries).		
I. Osler's Disease (Familial Hemorrhagic Telangiectasia) (132) (133)	This is an hereditary disease (in both males and females), characterized by plexes of fragile capillaries occurring in the mucous membranes of the nose, mouth (under tongue particularly) stomach, intestines, uterus, bladder, etc., which rupture easily, and bleed voluminously. The platelets are normal in number.	1. Moccasin Snake venom (123). One to three cc. of 1/3000 moccasin venom is given subcutaneously daily until a smaller maintenance dose is established. 2. Radium (134). 3. Cautery of the bleeding points. 4. Transfusions.

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TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by Its Component Society, the Ohio Public Health Association

THE Tuberculin Test should be routinely used by every general practitioner. This is the unqualified recommendation made by all outstanding tuberculosis physicians. The general use of the Tuberculin Test will help to diagnose the many cases of early symptomless tuberculosis that now escape discovery. It directs the attention of the physician to the hidden foci of infection that so often go unnoticed to the detriment of families and communities.

Of the two accepted methods of giving the Tuberculin Test, the intracutaneous, intradermal method (Mantoux) is more accurate in that a known amount of tuberculin can be given and the dose increased if desired. For this reason, a slightly larger number of reactors can be found than is possible with the cutaneous (Pirquet) technic.

THE TUBERCULIN TEST

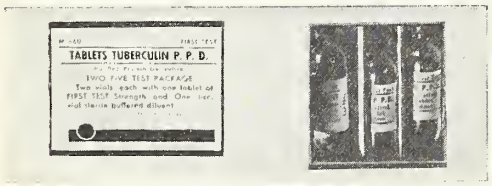
The following material has been used as an exhibit prepared by the National Tuberculosis Association for the meeting of the American Medical Association at Atlantic City in June, 1937. It shows the simplicity of the Tuberculin Test and furnishes graphic evidence of the advantage of P.P.D. (Purified Protein Derivative) over O.T. (Old Tuberculin).

TUBERCULIN TESTING requires little equipment.

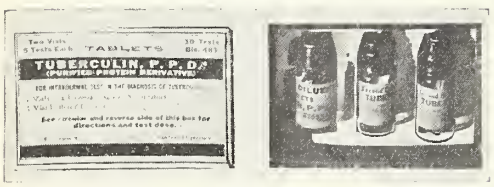


1 cc. tuberculin syringe
26 gauge platinum needle of ½" length

TABLETS TUBERCULIN P.P.D.
are always in uniform strength for immediate use.



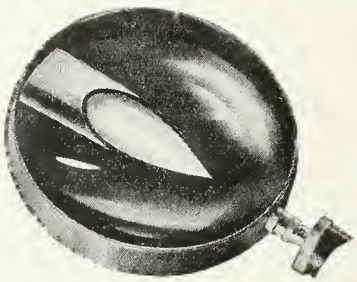
FIRST STRENGTH



SECOND STRENGTH

Available in 5, 10, 20, 100 and 500 test packages. Two commercial firms, Parke Davis and Company and Sharp & Dohme at present hold a U. S. Government license for the distribution of P.P.D.

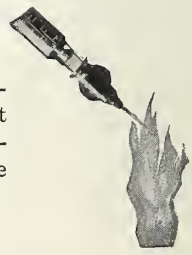
PREPARING FOR TUBERCULIN TEST



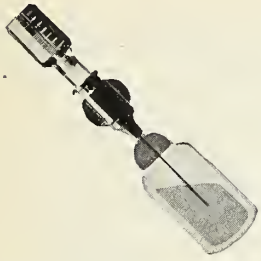
needle is inspected for sharpness.

NEEDLE IS FLAMED

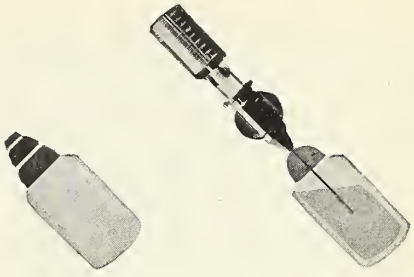
The proteins that form the active part of tuberculin are heat resisting to a considerable degree, hence flaming is preferable to boiling.



TUBERCULIN P.P.D. SOLUTION IS EASILY AND QUICKLY PREPARED



DRAW sterile buffered saline diluent into sterile tuberculin syringe.



TRANSFER diluent with aseptic precautions to vial containing tuberculin tablet and dissolve.

MAKING THE INJECTION

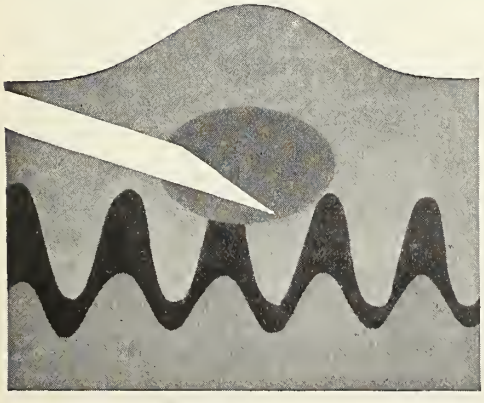


Cleanse flexor surface of forearm with 95% alcohol.

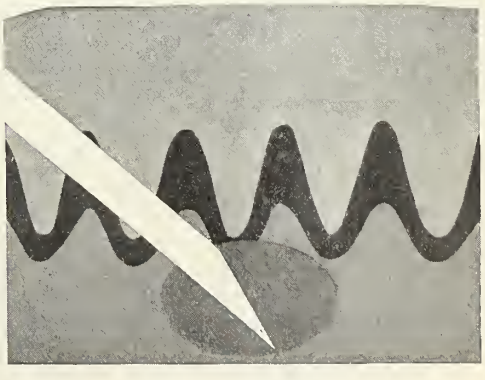


Needle is inserted intradermally (intracutaneous) Opening of needle faces up.

INSERTING NEEDLE



RIGHT—intradermal.



WRONG—subcutaneous.
No local reaction may appear and general febrile reaction may result.

INJECTION COMPLETED



Inject 0.1 cc. of tuberculin dilution.



If this is done correctly a small white bleb will rise over the needle point.

READ TUBERCULIN TEST

48 hours after injection

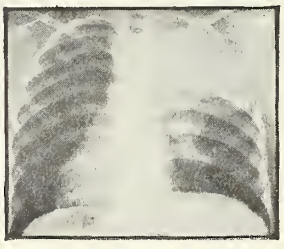
NEGATIVE REACTION



Negative Reaction. No tubercle bacillus infection present, tuberculosis may be ruled out. However, if reaction following weak-strength (first) dose is negative, test should be repeated with stronger (second) dose. Sensitiveness to tuberculin may be absent in acute miliary or generalized tuberculosis and during some acute infectious diseases such as measles and whooping cough.

Positive Reaction. Tuberculosis infection present. Redness is of less significance than the swelling. When in doubt pass finger over the tested area, as the induration caused by the edema can sometimes be felt when it does not produce an elevation that can be seen.

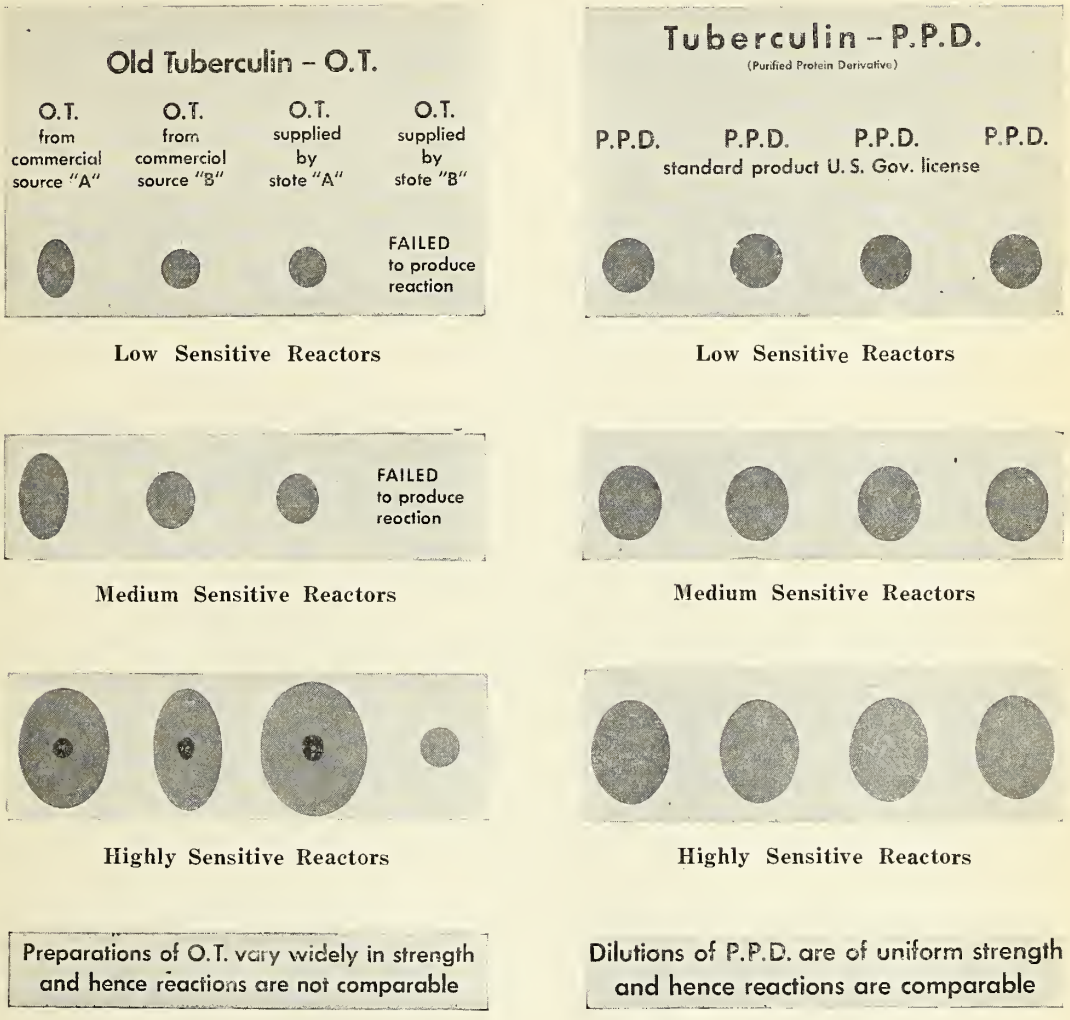
POSITIVE REACTORS
should have a Chest X-ray



POSITIVE REACTION



COMPARING REACTIONS FROM O.T. AND P.P.D.



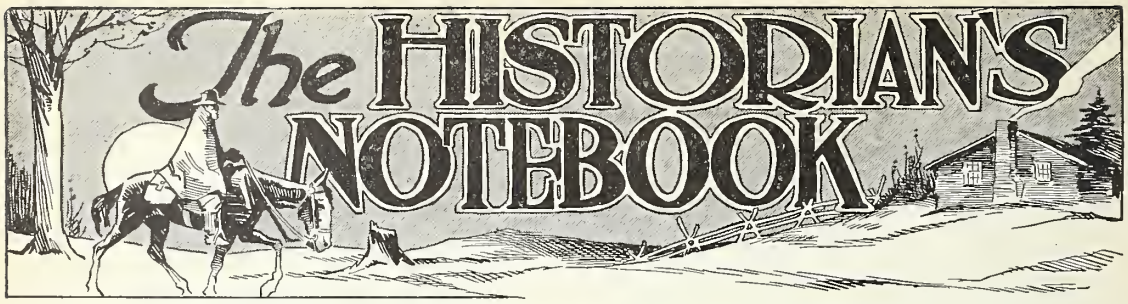
Each shaded area represents relative size of tuberculin reaction from identical dosage of O.T. and P.P.D. Black spots represent necrosis.

National Social Hygiene Day Will be Observed on February 2

National Social Hygiene Day, the second observance of which has been set for February 2, 1938, by the American Social Hygiene Association. Interested official and voluntary agencies will concentrate their efforts at this time on giving the subjects of syphilis and gonorrhea the widest possible publicity, by arranging for meetings of interested groups, press stories and comment, appropriate radio broadcasts, and the like. Particular emphasis will be laid on the control of syphilis among the 20 to 30 year age group, in which more than half of all new infections occur.

Suggestions for meetings and practical community programs may be obtained from the American Social Hygiene Association, 50 West 50th Street, New York City. The Association will be glad to supply interested persons and groups with materials, such as exhibits, films, and literature.

General John J. Pershing is chairman of the National Anti-Syphilis Committee of the Association. The committee includes Dr. J. H. J. Upham, Columbus, and Dr. Harold N. Cole, Cleveland.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

EARLY MEDICAL ORGANIZATION IN OHIO—ITS FIRST PUBLICATION

By ROBERT G. PATERSON, Ph.D., Columbus, Ohio

THE foregoing photostatic copy of the title page of a small 12 mo. volume of 22 pages is thought to contain the first printed account of medical organization in Ohio.[1]

As a result of the act of February 8, 1812, a convention styled as "the President and Fellows of the Medical Society of the State of Ohio"[2] was designated to be held at Chllicothe, Ohio "on the first Monday in November next". Official delegates were to be sent from each of the seven districts created by the law.

Upon the date set five men met at Chillicothe. They were Joseph Canby, M.D., Lebanon; Samuel Parsons, M.D., Columbus; Daniel Drake, M.D., Cincinnati; Joseph Scott, M.D., and John Edmiston, M.D., both of Chillicothe. No convention was held due to the lack of a quorum[3] since the law specified a quorum of ten members necessary to transact business.

Under the Act of January 15, 1821, the censors of the nine districts created were required to send a delegate to a convention to be held in Columbus, Ohio, on "the first Monday of June next". These delegates when assembled were constituted a body corporate and politic under the name of "The Medical Convention of Ohio".[4] No printed record of this convention seems to have been published, nor is it certain that such a meeting was held.

Finally the Act of February 26, 1824, provides the background for the publication under discussion. It divided the state into 20 districts for the organization and establishment of medical societies. The law designated a place ("Columbus, Ohio") and the time ("second Monday in December in the year 1827") as the first meeting of what was to be a general representative convention of the medical societies of the state of Ohio. The delegates were to be elected by each of the district societies. Various powers over the local societies were conferred by the Act upon "the general Medical Society of the state of Ohio".[5] Subsequent amendments increased the number of districts to 22.

The Author

● Robert G. Paterson, Ph.D., is executive secretary of the Ohio Public Health Association, and professor in the School of Social Administration, Ohio State University.

The first meeting took place on December 10, 1827, and some 20 delegates were present, (the seventh and ninth districts were not represented). The delegates elected John Wooley, M.D., Cincinnati, president and Thomas Flanner, M.D., Zanesville, secretary. The Convention drew up a constitution for a state medical society and agreed that the next meeting would be held on the first Monday of January, 1829, and subsequently every other year thereafter. No published record of this meeting seems to have been made.

As stipulated, a meeting was held in Columbus, Ohio, January 5-8, inclusive, 1829. There were 17 physicians present representing all but the fifth, sixth, eighth, fourteenth and nineteenth distrcts. The officers elected were:

President—John Cotton, M.D., Marietta

Vice President—John C. Dunlavy, M.D., Lebanon

Recording Secretary—John E. Bush, M.D., Cincinnati

Corresponding Secretary—Benjamin Dickson, M.D.,

Treasurer—Samuel Parsons, M.D., Columbus.

The proceedings of the four-day session are published in the volume under discussion together

AN ACT

TO INCORPORATE

MEDICAL SOCIETIES

FOR THE PURPOSE OF REGULATING THE

PRACTICE OF PHYSIC AND SURGERY

IN OHIO

TOGETHER WITH THE PROCEEDINGS

OF THE

GENERAL MEDICAL SOCIETY

COLUMBUS

PRINTED BY OLMSTED, BAILHACHE AND CAMRON.

1829

with the laws of the General Assembly covering medical licensure and constitution and By-Laws of the state society.[6]

REFERENCES

1. A copy is in the Army Medical Library, Washington, D. C., from which the photostat was taken. There is no copy in Cleveland, Cincinnati, or Columbus libraries so far as can be ascertained.

2. Laws of Ohio 1811 Vol. 10, Chap. 25, p. 58.

3. Commenting on this futile meeting Edward B. Stevens, M.D., says: "There were present just five delegates: x x. Of course there was no convention, but we cannot withhold our admiration of the spirit which impelled these gentlemen to journey the breadth of a state in midwinter with such facilities for travel as we may suppose sixty years ago."

Transactions, 25th annual meeting, Ohio State Medical Society, 1870. p. 96.

Dr. Drake has described the situation as follows:

"Twenty-two years ago, we recollect to have made a winter visit to Chillicothe, for the purpose of attending the first Convention under the law. x x x but five could not form a quorum, and no convention was organized.

Western Journal of the Medical and Physical Sciences, 1834, Vol. 7, p. 479.

4. Laws of Ohio 1821, Vol. 19, p. 28.

5. Dr. Peter Allen in his "Valedictory address" reverts to this meeting in the following vein:

"Toward the latter part of that year, some fifteen or twenty horsemen might have been seen wending their weary way, through mud and mire, along the different roads that centered in the village of Columbus. Their personal appearance somewhat resembled that of a company of men crawling out of a canal, where they had been excavating in a rainy day."

Transactions 12th annual meeting Ohio State Medical Society 1857, p. 34.

6. Dr. Allen states that the "Constitution was formed, after a model of a Society then existing in the State of Massachusetts".

Op. Cit. p. 34. Presumably the Massachusetts Medical Society founded in 1781.

SARDIUS BREWSTER

Sardius Brewster—a lineal descendant of the Elder William Brewster of the Mayflower—was born in the year 1785, the youngest of ten children. He studied medicine with his oldest brother Oliver Brewster who lived in Pittsfield, Massachusetts. In 1809 he married Harriet Waite in Cannon, Connecticut.

After practicing medicine many years in New York State he came to Austinburg, Ohio, in order to be near his oldest son and a daughter who had settled there, and lived there until his death in 1866, a period of about eight years.

Sardius Brewster was a man of high character and was universally respected wherever he lived, as a man and a physician. He had a good intelligence and a natural ability and refinement of taste in writing, as shown by an address which he wrote and delivered before a medical society in New York State.

His appearance was impressive, he was of good height with a very erect bearing and particular in his dress. An old resident has recited that it would often happen on Sunday morning that she would walk to church just back of Dr. Brewster and his wife, he in black broadcloth and wearing a silk hat, and his wife correctly attired in Sunday-go-to-meeting clothes. His physical vigor held out to the end, it is recalled that he was seen on the street in Austinburg walking with his usual brisk step and stopping to speak in his usual cheerful manner a short time before he was stricken suddenly with the illness which ended his life in a few hours. He is buried in the Center Cemetery in Autsinburg.

Members of the State Association who have any material dealing with the history of medicine in Ohio or have suggestions as to where such material may be obtained are respectfully urged to communicate directly with Dr. Tucker, who "keeps" The Historian's Notebook for *The Journal*, or write *The Journal* so that such information may be relayed to him.—The Editor.

PROCEEDINGS OF THE COUNCIL

Practice of Medicine by Nurses, Technicians, Etc., Condemned; Policy on Activities of "Committee of Physicians" Adopted; Budget For 1938 Drafted and Approved at November 21 Meeting

THE regular meeting of The Council of the Ohio State Medical Association was held Sunday, November 21, 1937, at the Headquarters Office, Columbus, Ohio, with the following in attendance: President Alcorn, President-Elect Hein, Past-President Huston; Councilors Smith, Hogue, Klotz, McCormick, Skipp, Kirkland, Brush, Seiler and Sherburne; Treasurer Beer, Dr. Forman, Dr. Upham, Executive Secretary Nelson and Assistant Executive Secretary Saville.

On **motion** by Dr. Sherburne, seconded by Dr. Brush and **carried**, the minutes of the last meeting of The Council, held on July 11, were approved as published in the August issue of *The Journal*, pages 898-903.

Membership Statistics—It was reported that the total membership of the State Association as of November 21, was 5,927 compared to 5,594 on the same date a year ago, and to 5,628 as of December 31, 1936.

Death of Dr. Jenkins Reported—President Alcorn informed The Council of the sudden death of Dr. Alfred A. Jenkins, Cleveland, Councilor of the Fifth District. The President appointed Dr. Skipp as official representative of The Council at the funeral of Dr. Jenkins. On **motion** by Dr. Sherburne, seconded by Dr. Klotz and **carried**, the President was authorized to appoint a committee to draft a resolution relative to Dr. Jenkins' death. Dr. Alcorn appointed as members of the committee: Dr. Sherburne, Dr. McCormick and Dr. Brush. Later, the committee reported the following resolution, which was adopted by a rising vote:

Resolution Adopted

"The Council, having been informed of the sudden and untimely death of Alfred A. Jenkins, M.D., Cleveland, member of The Council of the Fifth District, extends to the family of Dr. Jenkins the sincere sympathy of the Ohio State Medical Association and the deep personal sorrow of those who have been associated with him in the official activities of the Association.

"The passing of Dr. Jenkins is a distinct loss to the medical profession and especially medical organization which he had served long, faithfully and meritoriously in various official capacities. Always ready and anxious to bend his efforts to further activities designed to enhance the professional, educational and scientific standings of his profession, Dr. Jenkins never shunned responsibility and never failed to align himself with the leaders in the promotion of projects which have been beneficial to his profession, his colleagues individually, and the public at large. He will be missed by many colleagues who looked to him for advice and guidance on professional and personal matters and highly respected his counsel and the example he set for future generations of physicians. The Council regrets that it will not have the benefit of his judgment and initiative during its future deliberations but is deeply appreciative of the many constructive contributions which he made during his term of service.

"To signify its respect and esteem for Dr. Jenkins and to let them know that the officials of the Ohio State Medical Association desire to share with them their grief and sorrow, The Council decrees that copies of this statement be sent to the members of his family and, further, that it be spread upon the official minutes of The Council to express the appreciation of this Association for the conscientious and efficient services rendered by him in the interest of his profession."

Dr. Paryzek Elected Councilor—On **motion** by Dr. Brush, seconded by Dr. Sherburne and **carried**, Dr. Harry V. Paryzek, Cleveland, a former member of The Council, was nominated and elected Councilor of the Fifth District, succeeding the late Dr. Jenkins, for the balance of the term which expires at the 1938 Annual Meeting.

REPORT OF COUNCILORS

First District—Dr. Smith announced that plans are being made for a meeting of the First District at Hamilton, Ohio, some time in January, and that an official announcement would be made available for publication in the January 1 issue of *The Journal*.

Second District—Counties of the Second District are cooperating with the Bureau of Child Hygiene, State Department of Health, in refresher courses in obstetrics and pediatrics, it was announced by Dr. Hogue. Also, he announced that the district is planning for a meeting in the early Spring.

Third District—Dr. Klotz congratulated the Committee on Education on the success of the Regional Postgraduate Lectures being held in Northwestern Ohio, and announced that many members of societies in his district were attending the lectures and that they felt this was one of the most meritorious projects ever undertaken by the State Association.

Fourth District—Many members of the societies in the Fourth District are attending the Regional Postgraduate Lectures, Dr. McCormick announced. He stated these meetings were bringing members together frequently and would be

beneficial in organization activities. Dr. McCormick said he had advised county societies to hold regular meetings in addition to the postgraduate sessions.

Sixth District—Dr. Skipp reported on the last meeting of the Sixth District, held at Millersburg. Also, he reported on meetings in Wayne County, Stark County and Ashland County. Dr. Skipp congratulated the Summit County Medical Society on its successful postgraduate day program.

Seventh District—Dr. Kirkland reported that the societies in the Seventh District had been holding regular meetings and that no unusual problems were pending.

Eighth District—One of the most successful meetings ever held by the Eighth District was held at Zanesville recently, Dr. Brush reported. An excellent program was presented by members of the faculty of the College of Medicine, University of Cincinnati, on poliomyelitis, with more than 100 physicians present.

Ninth District—A report on the Ninth District meeting, held at Portsmouth, was made by Dr. Seiler. He said that more than 50 per cent of the members of the district attended the Portsmouth meeting and that an excellent program was presented.

Tenth District—Dr. Sherburne announced that he is planning trips to all societies in his district during the next few months.

REPORT OF COMMITTEE ON PUBLIC RELATIONS AND ECONOMICS

The following report of the Committee on Public Relations and Economics was presented to The Council by the Executive Secretary on behalf of Dr. C. W. Stone, chairman of the committee:

"A meeting of the Committee on Public Relations and Economics was held on Saturday evening, October 23, the night before the Mid-Year Organization Conference in Columbus. Many important questions were considered, among which were the following which the committee believes should be presented to The Council for its information and action if necessary:

"1. The committee gave careful consideration to a request of the State Division of Public Assistance for the cooperation and advice of the committee on the matter of formulating a set of 'Health Standards' to govern the medical and health programs for dependent children in the various counties. Proposed 'Health Standards' submitted by the Division were studied. After careful analysis and a review of comments which had been obtained in advance by the committee from a number of outstanding pediatricians, the committee made extensive modifications in the draft submitted by the Division. The revised 'Health Standards' have been transmitted to the Division for such action as the Division believes advisable. If adopted by the Division as submitted by the committee, we believe that these regulations will serve as a sound and practical basis for the programs which will be established in the various counties.

"2. It was reported to the committee that in some parts of the state, nurses and technicians employed by factories and mercantile establishments are rendering medical services in violation of the Ohio Medical Practice Act. Believing this situation is one which should be corrected, and that a statement setting forth the policy of the Ohio State Medical Association on this question would expedite discontinuance of such practices, the Committee has drafted the following statement for consideration of The Council:

Statement of Policy

The Council of the Ohio State Medical Association has been informed that registered nurses and technicians employed in first-aid ,stations and plant hospitals operated by some industrial concerns and mercantile establishments throughout the state are rendering services to disabled workers which services are believed to constitute the practice of medicine as defined in Section 1286 of the General Code of Ohio.

In the opinion of The Council, the practice of medicine by nurses and others, who have no legal right to do so, should be discontinued for the following reasons:

1. Sick or injured workmen are entitled to efficient, competent medical care which cannot be provided by those possessing limited scientific knowledge and medical training—even by a registered nurse.

2. The practice of medicine by a person who does not hold a certificate from the State Medical Board entitling him or her to do so, is unlawful (Section 12694, G.C.) and therefore against sound public policy.

3. As set forth in Sections 1286 and 1287, G.C., a person is regarded as practicing medicine 'who examines or diagnoses for a fee or compensation of any kind, or prescribes, advises, recommends, administers or dispenses for a fee or compensation of any kind, direct or indirect, a drug or medicine, appliance, application, operation or treatment of whatever nature for the cure or relief of a wound *** injury *** or disease', excepting 'service in the case of emergency or domestic administration of family remedies'.

Therefore, before a person, specifically a registered nurse, may legally render services enumerated above, unless such services come within the purview of 'service in the case of emergency', he or she must hold a certificate issued by the State Medical Board granting him or her the legal right to practice medicine and surgery.

4. The term 'emergency' as used in Section 1287, G.C., has been defined by the Attorney General of Ohio to 'include such cases of sudden and unexpected illness or injury which call for immediate medical attention'.

In that opinion, the Attorney General pointed out that no hard and fast rule as to emergencies which would be applicable in all cases could be formulated, but in the same opinion he stated, in effect, that emergency treatment is interpreted to mean temporary care given a sick or injured per-

son until a legally licensed physician takes charge of the case and should be limited to an act which is aimed to save the life of the individual or to alleviate suffering pending the arrival of a physician.

Obviously, the interpretation precludes the following services by a nurse or technician (cited for purposes of illustration) unless such services are rendered under the personal supervision of a physician: Suturing cuts, removing foreign body from the eye under anesthetic, routine treatment of burns, prescribing, dispensing or administering for colds, boils, headache, dysentery, stomach disorders. skin diseases, sunburn, etc. Such services are not services performed in cases of emergency and the person rendering them is engaged in the practice of medicine.

5. Rendition of services, which technically and legally are medical services, by a nurse or technician unless a licensed physician is present and directly supervising such services, or such services are authorized by the attending physician, is a violation of the spirit of the Ohio Workmen's Compensation Act and contrary to a standing regulation of the State Industrial Commission which, in effect, states that medical care of injured workmen must be rendered under the personal supervision of the attending physician and for which he is at all times responsible. That regulation precludes the payment of fees from the Workmen's Compensation Fund to a physician for services, unless such services are rendered by him or under his direct, personal supervision, indicating quite clearly that a physician has definite responsibilities toward his patients which cannot be delegated to others.

6. Encroachment upon the practice of medicine by an unlicensed person constitutes a definite legal hazard for such person. He or she may be prosecuted for violation of the Medical Practice Act. In addition, such person, or his or her employer, runs the risk of being sued for damages for negligent treatment at the hands of an incompetent and unlicensed individual.

Nurses employed by industrial plants and mercantile establishments can and do render indispensable assistance to physicians in their efforts to rehabilitate disabled employes and return them to gainful employment. However, the factory and store nurse—the nurse in private practice for that matter—should realize: (1) There is a definite line of demarcation between what constitutes the practice of nursing and the practice of medicine. (2) Even the graduate nurse who possesses much scientific education and training is not qualified to render unsupervised medical service. (3) The scope of the nursing profession is limited and the nurse should not exceed her rights. (4) The nurse who encroaches upon the practice of medicine exposes herself to criminal prosecution and civil litigation.

The industrial and mercantile executive should realize: (1) Good medical care—the kind which will bring about prompt rehabilitation of the disabled worker—cannot be supplied by persons lacking adequate medical training. (2) The policy of permitting and encouraging nurses to render medical care to disabled employes, which services cannot be classified as emergency in character, is unfair to the disabled worker; unsound from a business point of view; and indirectly responsible for procedures which are unlawful.

"If adopted by The Council, we further recommend that copies of the foregoing statement be sent to the following: State Medical Board, State Industrial Commission, State Nurses' Association, Ohio Manufacturers' Association, Ohio Council of Retail Merchants, and all component county medical societies.

"3. A communication from Dr. Poling, secretary of the Mahoning County Medical Society, relative to the Youngstown Maternal Health Association was discussed by the committee. After careful consideration of the inquiry made in Dr. Poling's letter, the committee voted to submit the following recommendations to The Council:

That The Council advise the Mahoning County Medical Society that the Ohio State Medical Association has not expressed approval or disapproval of birth control, and considers that a component county medical society would be wise in following a similar policy, and therefore recommends that the Mahoning County Medical Society should not officially approve or disapprove of the Youngstown Maternal Health Association.

"Although many other questions of interest were discussed by the Committee before adjournment, none of them, in the opinion of the committee, requires action by The Council at this time."

On motion by Dr. Smith, seconded by Dr. Seiler and carried, The Council approved and adopted the statement submitted by the committee relative to the practice of medicine by nurses, technicians, etc.

On motion by Dr. Huston, seconded by Dr. Klotz and carried, the recommendations of the committee relative to the Youngstown Maternal Health Association were approved and adopted.

On motion by Dr. Smith, seconded by Dr. Seiler and carried, the report of the committee, as a whole, was adopted and approved.

REPORT OF COMMITTEE ON EDUCATION

The Executive Secretary presented, on behalf of Dr. C. L. Cummer, Cleveland, chairman of the Committee on Education, the following report which, on motion by Dr. Smith, seconded by Dr. Hogue and carried, was approved and adopted by The Council:

"Since the last meeting of The Council, a number of the more important plans and proposals of the Committee on Education have reached the stage of actual operation.

"The Committee is highly pleased at the successful beginning of the Regional Postgraduate Lectures. The first and second sessions of the initial course of lectures were held October 21 and November 4 at Findlay and Defiance, respectively. The registration at the Findlay session was 200 and that at the Defiance session, 175. This indicates that the project has considerable appeal and has won an enthusiastic response from the members.

"There are some imperfections in the plan. However, it must be realized that this is a new venture on the part of the Association and that it may take some little time to make these courses

of lectures everything which can be desired. The committee has polled many who have attended the lectures to date and is using their criticisms and suggestions as a basis for modification of the original plans and as a guide to the remaining lecturers.

"The Councilors of the Third and Fourth Districts, the officers of the various county societies in Northwestern Ohio and the local co-chairman, Dr. Mowry and Dr. Slosser, have given the committee splendid active support. They, with the lecturers, deserve much of the credit for the success of this new activity to date. The committee hopes that it will have the same degree of cooperation from Councilors and officers in other sections of the state.

"It is quite likely that the first course of lectures will be given next at Chillicothe for the benefit of members of the South-Central counties, inasmuch as the Ross County Medical Society has officially requested the committee to select Chillicothe as the center of Region B. A preliminary conference to discuss plans and details will be held at Chillicothe in the near future.

"On September 1, the State Association Speakers Bureau started to operate. This activity has met with much widespread approval. To date the Bureau has furnished lists of speakers for 12 county and district meetings.

"A meeting of the Sub-Committee on Public Health Education is being planned for Sunday, December 12, in Columbus, at which plans and proposals will be discussed and be presented to the Council for consideration and action at a later date.

"The Sub-Committee on District Meetings expects to meet before the end of the year for the purpose of drafting a set of recommendations to be passed on to district officers for their guidance in arranging next year's meetings.

"The committee is cooperating with public health officials by assisting in the promotion of refresher courses in obstetrics and pediatrics sponsored by the Bureau of Child Hygiene, State Department of Health. Also, the committee is cooperating in the campaign against syphilis, by urging county and district societies to give their members at least one program on the diagnosis and treatment of early syphilis during the next year.

"The committee has moved slowly, believing that this is the proper way to minimize mistakes and to insure success of its various programs. It appreciates the support it has received from The Council and welcomes the advice and criticism of individual members of The Council."

1938 ANNUAL MEETING

Dr. Sherburne, chairman of the Committee on Scientific Work, reported on plans for the 1938 Annual Meeting, May 11 and 12 in Columbus. He stated that the special committee, named by The Council at its last meeting, had selected the Neil House as the place for the meeting. Detailed information relative to the program and Scientific Exhibit was submitted by Dr. Sherburne, who urged that members of The Council assist the committee in securing scientific exhibits.

Report from Judicial Council—After hearing a discussion of a number of questions, pending before the Judicial Council of the American Medical Association, by Dr. Geo. Edw. Follansbee, Cleveland, chairman of the Judicial Council, The Council then recessed for lunch.

FINANCIAL REPORT AND 1938 BUDGET

Following lunch, The Council went into executive session during which it considered the following report of the Committee on Auditing and Appropriations, which, on motion by Dr. Smith, seconded by Dr. Brush and carried, was approved and adopted by The Council:

Under the provisions of the By-Laws of the Ohio State Medical Association, the Committee on Auditing and Appropriations is charged with the responsibility of handling certain financial details and of preparing an annual budget for the consideration of The Council at its last meeting of each fiscal year.

The committee at this time desires to report to The Council on the financial condition of the State Association and submit a suggested budget for the calendar year, 1938.

Inasmuch as financial statements are furnished each month to members of The Council, it seems unnecessary for the committee to make a detailed report on the financial condition of the State Association except to state that the Association, during 1937, has lived well within its current income and, in the opinion of the committee, has spent its revenue to exceptionally good advantage.

As members of The Council know, the State Association has launched a number of very important new activities and services during the past year. These have met with widespread and hearty approval among the membership which, incidentally, is the largest in the history of the Association, being approximately 5,950. In the opinion of the committee, a greater portion of the membership is taking a more active interest in the affairs of organized medicine now than ever before, and there seems to be a genuine feeling among the members that the Ohio State Medical Association is rendering more beneficial services at this time than at any other time in the history of the organization.

The Regional Postgraduate Lectures have been a distinct success so far. The Speakers Bureau has become exceedingly popular. *The Journal* is being read by more members and the improvements which have been made in it have won much favorable comment. An extremely difficult legislative session was met successfully. A special committee on relief is making an extensive investigation of this complicated problem. The personal services rendered by the State Headquarters Office have been increased, benefiting individual members as well as the entire membership. The Mid-Year Organization Conference for local officers and committeemen has become a fixture. There has been an unusual revival of interest in, and attendance at, the district meetings. Plans are now being prepared for one of the best, if not the best, Annual Meetings of the State Association, which will be held May 11 and 12, 1938. These activities, which are among the more important of the State Association, are mentioned merely to show how the Association has expanded its activities and programs and why the membership generally is taking a keener interest in the work of the State Association.

Of course, the State Association has not by any means reached the limit of its scope and activities. Several committees are, at this time, working on

new proposals, new services, etc., and at the appropriate time will submit recommendations to The Council. In addition, a number of critical economic, social and governmental questions will have to be studied by officials of the Association during the ensuing months and it is our prediction that the coming year will be even a more active period than that of the past 12 months.

These comments are submitted for the purpose of emphasizing why so much of the current revenue of the State Association has had to be put to work, and why adequate provision must be made for old as well as new services and activities in the 1938 budget.

The committee has given careful study to the matter of the budget for the next year, basing it on conservative estimates of anticipated revenue and on contemplated services and programs.

ANTICIPATED INCOME FOR 1938

It is believed that the total income of the State Association for 1938 will be approximately $38,450, itemized as follows:

1. Cash on hand in excess of stationary reserve fund of $70,000.00		$ 6,800.00
2. Membership dues		29,550.00
5,800 members @ $5.00	$29,000.00	
150 members @ 3.00	450.00	
50 members @ 2.00	100.00	
Total	$29,550.00	
3. Interest on government bonds		2,100.00
Total estimated revenue		$38,450.00

PROPOSED 1938 BUDGET

Using the above total as a basis, the committee recommends the following budget for the calendar year, 1938:

1. Ohio State Medical Journal		$12,500.00
2. Executive Secretary, salary		6,000.00
3. Executive Secretary, expenses		800.00
4. Asst. Executive Secretary, salary		4,600.00
5. Asst. Executive Secretary, expenses		400.00
6. President, expenses		400.00
7. Treasurer, salary		300.00
8. Council expenses		700.00
9. District subsidy		2,000.00
10. Annual Meeting expenses		800.00
11. Committee on Auditing and Appropriations		100.00
12. Committee on Public Relations		1,000.00
13. Committee on Medical Defense		----------
14. Miscellaneous Committees		----------
(Included under Item 15)		
15. Committee on Education		1,800.00
Postgraduate Lectures	$1,000.00	
Speakers Bureau	500.00	
Miscellaneous	300.00	
Total	$1,800.00	
16. Stationery and supplies		900.00
17. Postage and telegraph		1,400.00
(Additional amount for telephone previously paid in full by The Journal)		
18. Stenographer		1,380.00
19. Speakers Bureau		----------
(Included under Item 15)		
20. New equipment and replacements		----------
(Transferred to Journal account)		
21. Expenses of A.M.A. delegates		1,050.00
22. Office rent, insurance, bonding, etc.		2,000.00
(Rent paid by The Journal previously)		
23. Miscellaneous unassigned		320.00
Total		$38,450.00

EXPLANATORY NOTES

Item 1—A substantial increase in the appropriation for *The Ohio State Medical Journal* is recommended. Because of considerable increase in printing costs, due to wage increases at the job printing plant which publishes *The Journal*, and the cost of paper; and because of the increased size of *The Journal* each month in addition to incidental expenditures for other improvements which have been made in *The Journal;* the budgetary allowance for *The Journal* during 1937 was insufficient. Inasmuch as no decrease in *Journal* costs can be anticipated during 1938, the committee believes that this item should be increased so that *The Journal* can at least break even during the ensuing year.

Items 2, 4 and 18—The committee has no hesitancy in stating that it believes the personnel of the State Headquarters Office has rendered indispensable services to the membership generally during the past 12 months. Our full-time employes have worked tirelessly and diligently in carrying out the policies and instructions of The Council and various committees. We believe that they deserve tangible recognition for the part they have played in making many of the activities of the State Association during the past year successful, and we recommend increases in their remuneration for the ensuing year. Suggested salaries for three employes are listed in the proposed 1938 budget of the State Association. The remaining two are paid from *The Journal* account and a $15.00 per month increase for them is recommended.

Item 3—The same as 1937.

Item 5—Increase of $100.00 recommended. Believed necessary because of additional field work.

Items 6 and 7—The same as 1937.

Item 8—Increased field work by Councilors makes an increase of $100.00 in this item desirable.

Item 9—The same as 1937.

Item 10—A slight decrease is recommended as, in all probability, revenue from the Technical Exhibit at the Columbus meeting will be more than enough to meet Annual Meeting expenses.

Item 11—Inasmuch as some activities of this Committee during 1937 will not be necessary in 1938, the appropriation for the Committee on Public Relations and Economics can be decreased.

Item 13—Abandonment of the Medical Defense Plan makes it unnecessary to budget an amount for the Committee on Medical Defense. Should any expenditures for the Committee on Medical

Defense be necessary during the ensuing year, this matter can be considered by The Council when the occasion arises and provision made for an appropriation from the unassigned reserve funds.

Item 14—An appropriation for "Miscellaneous Committees" is not recommended inasmuch as a new account for the "Committee on Education" and its sub-committees is suggested, covering all committees to which definite provision has not been made in this budget.

Item 15—This is a new budgetary item which becomes necessary because of the active work of the Committee on Education, including the Postgraduate Lectures, Speakers Bureau, Public Health Education work, etc.

Item 16—A slight decrease is recommended in this item based on the past year's experience.

Item 17—This item shows a slight increase which will permit payment of part of the telephone service by the State Association, which account is now being paid in full by *The Journal*.

Item 19—This account has been included under the general heading, "Committee on Education", Item 15.

Item 20—Provision for new equipment and replacements has been made in the total amount allocated to *The Journal*, but of course, no equipment will be purchased without authorization of this committee. This transfer was made at the suggestion of the certified public accountant, who audits the accounts of the State Association and *The Journal*, in order to correlate the purchase of equipment with the item, "Furniture and Fixtures," which has been listed under assets of *The Journal*.

Item 21—The committee is of the firm belief that it is vital that the Ohio State Medical Association be fully represented at all sessions of the American Medical Association, and that it should assist in defraying the expenses of official delegates from Ohio to the A.M.A. meeting. The finances of the State Association will not permit it to pay all the expenses incurred by delegates to the A.M.A. meeting at San Francisco next June. Nevertheless, we recommended that the State Association make a contribution amounting to $150.00 per delegate, the total amount of such contributions being shown in this item.

Item 22—For quite a number of years the rent for the State Headquarters Office has been paid by *The Journal*. We believe that this inconsistency should be corrected, not only because the publication of *The Journal* is incidental to the entire business of the State Association, but also because it places a rather heavy burden on the limited resources of *The Journal*. Therefore, it is suggested that a new item, Item 22, be set up in the budget covering office rent, necessary insurance, bonding of employes, etc.

Item 23—This is a new item consisting of unassigned funds which may be used on authorization of the committee to cover expenditures outside the scope of other budgetary items.

PROPAGANDA OF COMMITTEE OF PHYSICIANS CONSIDERED; STATEMENT OF POLICY ADOPTED

A communication from the so-called "Committee of Physicians for Presentation of Principles and Proposals for the Improvement of Medical Care", asking the Ohio State Medical Association to pass on certain "principles and proposals" approved by that group, was read and all the material submitted by the group carefully considered. After a general discussion, The Council, on **motion** by Dr. Brush, seconded by Dr. Seiler and **carried**, adopted a Statement of Policy and instructed the Executive Secretary to send a copy to the "Committee of Physicians" and copies to each component county medical society in Ohio (see December 1, 1937, issue, *The Journal*, pages 1338-1342 for statement).

ACTION ON MEMBERSHIP INQUIRY

A communication from a physician requesting the Ohio State Medical Association to accept his State Association dues for the past four years (during which time he was not a member of his local medical society but which society recently accepted his local dues for those years), was read and discussed. The Council adopted the following, on **motion** by Dr. Brush, seconded by Dr. Seiler and **carried**:

"In the opinion of The Council there is no provision in the Constitution and By-Laws of the Ohio State Medical Association granting the Association authority to comply with the request of a physician that it accept from him annual State Association dues for past years for the purpose of having the membership records of the Association show that he was a member during those years.

"The Constitution and By-Laws of the Ohio State Medical Association provide that for the purpose of membership, the fiscal year of the Association shall begin on January 1 and end on December 31. They provide that membership in the Association each year shall date from the time annual dues are received in the offices of the Association and end on December 31 of that year. When a physician's annual dues are not received during a fiscal year his name cannot be entered on the membership roster of the Association for that year or any part thereof.

"The Constitution and By-Laws of the Association grant no one authority to change the membership records of the Association, which are kept in strict compliance with the foregoing provisions."

MISCELLANEOUS BUSINESS

Group Malpractice Insurance—A report from Mr. Leroy Eastman, Toledo, of the legal firm of Smith, Baker, Effler & Eastman, relative to group malpractice insurance was read and discussed and, on **motion** by Dr. Smith, seconded by Dr. Huston and **carried**, was referred to the Committee on Medical Defense for study and a subsequent report to The Council.

Group Health and Accident Insurance—Correspondence with officials of the Massachusetts Indemnity Insurance Company, relative to group health and accident insurance for members of the State Association, was referred to the Committee on Public Relations and Economics for study and a subsequent report to The Council, on **motion** by Dr. Smith, seconded by Dr. Sherburne and **carried**.

Tuberculosis Insurance—A request from officials of the newly-organized Tuberculosis Hospitalization Mutual Insurance Company for an expression of opinion by The Council on the plans

and the contract issued by that company was tabled, on motion by Dr. Smith, seconded by Dr. Beer and carried, pending receipt of further information from officers of the insurance company.

"The Birth of a Baby"—On motion by Dr. Skipp, seconded by Dr. Brush and carried, The Council approved the film, "The Birth of a Baby," produced by The American Committee on Maternal Welfare, Inc., for showings before lay groups.

Appreciations Expressed—On motion by Dr. Klotz, seconded by Dr. Sherburne and carried, the Executive Secretary was instructed to write Dr. Harry Reinhart, Columbus, and Dr. David Tucker, Jr., Cincinnati, thanking them for their meritorious contributions to *The Journal* through the "Case Record Presenting Clinical Problems" and the "Historian's Notebook," respectively.

Museum on Medical History—On motion by Dr. Sherburne, seconded by Dr. Skipp and carried, The Council expressed a willingness to cooperate with the newy-organized "Ohio Committee on Medical History and Archives" of the Ohio Archaeological and Historical Society, which plans to establish a museum and library for the preservation of material dealing with the history of medicine and dentistry in Ohio. A communication setting forth the plan of the committee, submitted by Dr. Jonathan Forman, chairman of the committee, was read and ordered filed.

Special Train Plans—The Executive Secretary announced that arrangements had been completed for a Special Train from Ohio, sponsored by the State Association, to the 1938 Session of the American Medical Association at San Francisco next June, and that detailed information would be carried from time to time in *The Journal.*

Hearing Requested—The Executive Secretary was instructed to request the Ohio Unemployment Compensation Commission for a hearing at which material could be presented by the State Association to substantiate the claim of the Association that it is exempt under the Ohio Unemployment Compensation Act. On motion by Dr. Sherburne, seconded by Dr. Skipp and carried, the Committee on Auditing and Appropriations was instructed to assist in the preparation of material to be presented at such hearing, if and when granted.

Mid-Year Organization Conference—Members of The Council expressed themselves as pleased with the recent Mid-Year Organization Conference held in Columbus, and expressed appreciation to those who had contributed to the program.

There being no further business The Council adjourned to meet at the call of the President.

Attest: CHARLES S. NELSON,
Executive Secretary.

Toledo Academy Sponsors Public Education Campaign on Syphilis

An intensive public educational campaign on syphilis will be conducted in Toledo from January 10 to February 10, by the Education Bureau of The Toledo Academy of Medicine, as the Academy's contribution to the national campaign for the eradication of venereal diseases.

The campaign will be two-fold in purpose. Believing that proper and adequate education on the subject is essential, ethical and dignified, publicity is being planned to bring the message to the people of Toledo. Talks on syphilis will be made by members of the Academy's Speakers Bureau before civic organizations, luncheon clubs, parent-teacher associations, labor organizations, American Legion posts, local high schools and colleges and similar groups. Local newspapers have been invited to publish specially prepared medical articles, and to support the campaign by proper publicity. The Central Outdoor Advertising Company will cooperate with billboard publicity.

The second purpose of the campaign is to get infected persons under competent medical treatment and to encourage everyone to have a blood test to determine the incidence of the disease. As a contribution from the medical profession, the Council of the Toledo Academy of Medicine has recommended that blood from patients presenting themselves for the syphilis test be drawn free of charge during the ten-day period from February 1-10. The fee for the laboratory test has been reduced to $2 by local pathologists as their contribution to the campaign.

In announcing the educational campaign, Dr. Fred M. Douglass, president of the Academy, said: "I cannot urge too strongly that every physician cooperate in this campaign. . . . This concession by every physician in Toledo will be appreciated by the public, and if properly explained as a campaign contribution will not be misunderstood or misinterpreted by patients".

Pamphlets on Nursing Available

Two vocational pamphlets, "Nursing and How to Prepare For It" and "Nursing—a Profession for the College Graduate", are available to physicians who, in addition to their many other responsibilities, must often act as vocational advisors and confidants to their young patients, from the Nursing Information Bureau, the American Nurses' Association. Physicians who wish to have copies of them either for reference or to give to some of their interested young patients, may secure them, free of charge, from Mrs. Elizabeth P. August, secretary, Ohio State Nurses' Association, 50 E. Broad St., Columbus, Ohio.

SUPER-FINE 1938 ANNUAL MEETING PROGRAM IN THE MAKING

Barring cyclones and high water, the program for the 1938 Annual Meeting of the Ohio State Medical Association, May 11 and 12, Neil House, Columbus, will produce the finest array of medical talent ever assembled for the membership of the State Association.

Plans for the 1938 meeting are progressing rapidly under the direction of the Committee on Scientific Work composed of Dr. C. C. Sherburne, Columbus, chairman, Dr. Claude B. Norris, Youngstown, Dr. Stanley D. Giffen, Toledo, Dr. Albert F. Kuhl, Dayton, and Dr. M. M. Zinninger, Cincinnati.

Officers of the Scientific Sections are completing arrangements for the section programs and applications for space in the Scientific Exhibits are being filed unusually early. Incidentally, these applications should be filed at once with the committee for review. Members who have done investigative or research work should take advantage of this opportunity.

The following list of guest speakers offers some idea of the splendid program which is in store for members: Dr. Irvin Abell, Louisville, President-Elect of the American Medical Association, (surgery); Dr. Perrin H. Long, Johns Hopkins Hospital, Baltimore, (sulfanilamide); Dr. Clara M. Davis, Winnetka, Ill., (pediatrics); Dr. Sumner L. Koch, Chicago, (infections of the hand); Dr. Hugo Roesler, Temple University, Philadelphia, (radiology); and Dr. Fred Wise, New York City, (dermatology).

Plan NOW to be in Columbus next May 11 and 12 for the biggest medical meeting of the year in Ohio and one of the best in the history of the Ohio State Medical Association.

Board of Internal Medicine Exams

The American Board of Internal Medicine will hold its next written examination on Monday, February 14, 1938, in various centers of the United States and Canada.

The examination will consist of two sessions of three hours each with the morning session held at 9:00 o'clock and the afternoon session held at 2:00 o'clock.

The candidates who are successful in this written examination will be eligible to take the practical examination which will be held in San Francisco the Friday and Saturday prior to the opening of the Annual Session of the American Medical Association, June 13-17, 1938.

The final date for filing applications for this written examination is January 15, 1938, and all applications should be in the office of the chairman before that date.

Further particulars and application blanks may be obtained from Dr. Walter L. Bierring, chairman, American Board of Internal Medicine, Suite 1210, 406 Sixth Avenue, Des Moines, Iowa.

War on T. B. Among Cattle a Success

Tuberculosis among cattle has been practically eliminated from 44 states which have been officially designated by the U. S. Department of Agriculture as modified accredited areas. Such designation signifies that bovine tuberculosis has been reduced to less than one-half of one per cent as shown by the tuberculin test. The extent of infection among cattle is shown as of July 1, 1937, by a new map of the United States, just issued by the Bureau of Animal Industry.

The shaded areas indicating the degree of infection in each county are shown on the map as confined to the States of California, South Dakota, New York, and New Jersey. The white areas which indicate practical freedom from infection, comprise 3,002 counties or 98 per cent of all the counties in the United States. Work is in progress in 61 of the remaining counties.

The development portrayed on the map has occurred since July, 1923, when 17 counties in 4 states were designated as the first modified accredited areas.

A. M. A. TRUSTEES ISSUE STATEMENT ON PROPOSALS AND PROPAGANDA OF "COMMITTEE OF PHYSICIANS"

IN response to many inquiries from physicians throughout the country, the Board of Trustees of the American Medical Association issued the following statement in *The Journal of the A.M.A.*, November 27, 1937, issue, concerning the "Principles and Proposals of the Committee of Physicians":

"Following the publication of the report of the American Foundation Studies in Government, a small group of physicians, assembled in New York, developed certain principles and proposals which have since been circulated by a self-appointed Committee of Physicians among the medical profession of the United States, with a view to obtaining signatures in their support. During a period of approximately six months, some 430 medical men have apparently permitted the use of their names. Early in November the self-appointed group of physicians released to the press for Sunday, November 7, a statement of principles and proposals to which the names of the 430 signers were affixed. The newspapers generally heralded this action as a revolt against the American Medical Association, in a great majority of the cases indicating that there was a revolt in behalf of 'state medicine.' The publication of this manifesto and the attached signatures has been heralded with glee by many of those who have been opposing the American Medical Association in behalf of cooperative practice, sickness insurance, and various fundamental changes in the nature of the practice of medicine. Within the last week another series of proposals has come from another self-appointed group requesting signatures of physicians. This series of proposals includes the suggestion for enabling legislation for sickness insurance.

OFFICIAL ACTION TAKEN IN JUNE

"The American Medical Association is an organization of physicians along strictly democratic lines. Representatives of county medical societies send delegates to state medical societies and these, in turn, send their delegates to the House of Delegates of the American Medical Association. It is possible for any physician, through his delegate, to obtain consideration of any proposal which he may wish to bring to the attention of the House of Delegates. At the Atlantic City session the delegates from New York State presented these principles and proposals, slightly modified, as an action of the House of Delegates of the Medical Society of the State of New York. They were carried before a reference committee and, in several sessions of that reference committee, considerable numbers of physicians presented arguments for and against their adoption. The House of Delegates, however, after thorough consideration of the report of the reference committee, and with full cognizance of the method of development of these principles and proposals, and of the considerations which were involved in their passage by the House of Delegates of the Medical Society of the State of New York, did not accept them. The House of Delegates did, however, point out the willingness of the medical profession to do its utmost today, as in the past, to provide adequate medical service for all those unable to pay either in whole or in part.

"Why, then, any necessity for the circulation of petitions presenting proposals for fundamental changes in the nature of development, distribution and payment for medical service? Is there a well designed plan to impress the executive and legislative branches of our government with the view that the American medical profession is disorganized, distrustful of its leaders, undemocratic in its action and opposed to the best interests of the people? Who may profit from such evidence of disorganization? Is there any evidence that the self-appointed Committee of Physicians and the 430 physicians who have affixed their names to these principles and proposals are any better able to represent the opinion of the American medical profession than the democratically chosen House of Delegates of the American Medical Association—one of the most truly representative bodies existing in any type of organized activity in this country today?

PROPAGANDA MISLEADING

"The House of Delegates has given its mandate to the Board of Trustees, to the officers and to the employees of the Association. That mandate opposes the principles and proposals emanating from the Committee of Physicians, and equally the new proposals. If the House of Delegates sees fit to depart from the principles now established, it will be the duty of the Board of Trustees, the officers and the employees of the American Medical Association to promote such new principles as the House of Delegates may establish. Until, however, the regularly chosen representatives of the 106,000 physicians who constitute the membership of the American Medical Association (now the largest membership in its history) determine, after due consideration, that some fundamental change or revolution in the nature of development, distribution and payment for medical service in the United States is necessary, physicians will do well to abide by the principles which the House of Delegates has established.

They will at the same time deprecate any attempts inclined to lead the executive and legislative branches of our government, as well as the people of the United States, into the belief that the American medical profession is disorganized.

"Members of the medical profession, locally and in the various states, are ready and willing to consider, with other agencies, ways and means of meeting the problems of providing medical service and diagnostic laboratory facilities for all requiring such services and not able to meet the full cost thereof. The American Medical Association has reaffirmed its willingness on receipt of direct request to cooperate with any governmental or other qualified agency and to make available the information, observations and results of investigation, together with any facilities of the Association. Thus far, no call has come from any governmental or other qualified agency, for the cooperation of the American Medical Association in studying the need of all or of any groups of the people for medical service, to determine to what extent any considerable proportion of our public are actually suffering from lack of medical care. The offer still stands as evidence of the willingness of the American Medical Association to aid in finding a solution to any or all of the problems in the field of medical care that now prevail."

Members of the Ohio State Medical Association who have not already done so should read the statement of policy adopted by The Council of the State Association on November 21 and published in the December, 1937, issue of *The Journal*, pages 1338-1342.

Baumanometer Stolen

Dr. Luther W. High, Millersburg, has reported to *The Journal* that on November 22 a morphine addict stole a new Kompak Baumanometer from his office. It was in a gun metal case, and had Dr. High's nameplate cast on the cover.

The man is described as being about 45 years old, round face, wearing a dark suit and a brown overcoat, and about five feet nine inches tall.

Ohio physicians are warned to be on the lookout for this addict, and anyone approached to purchase such an instrument should communicate immediately with Dr. High.

Additional Hospitals Approved by A.M.A.

The Council on Medical Education and Hospitals of the American Medical Association has given its approval to the following Ohio hospitals since the publication of the last previous list in the October, 1937, issue of *The Ohio State Medical Journal*, pages 1158-1160; Fairview Park Hospital, Cleveland, approved for intern training, and Harding Sanitarium, Worthington, approved for residency in neuropsychiatry.

New Act for Care of Insane and Feeble-Minded Effective January 1

Recodification and revision of the existing statutes relating to the commitment, release and transfer of the insane, feeble-minded and epileptic was effected by Am. Sub. House Bill 545, enacted by the Ninety-Second Ohio General Assembly, April 29, 1937, and which became effective January 1, 1938. Sponsored by the Ohio Probate Judges' Association, the bill was passed during the closing hours of the regular session of the legislature. Chief provisions of the act were analyzed in the July, 1937, issue of *The Ohio State Medical Journal*, pages 796-7.

The act establishes a division of mental diseases in the State Department of Public Welfare and authorizes a state-wide system of psychopathic hospital service through out-patient clinics "for the observation, care and treatment of the mentally ill, and especially for those whose condition is incipient, mild or of possible short duration".

Failure of the legislature last Spring to appropriate $1,000,000 for that purpose has delayed establishment of the out-patient clinics.

Announcement of the appointment of the new commissioner of mental diseases and the personnel of the advisory council authorized by Am. Sub. H.B. 545, has not yet been made by the Governor. The new law requires that the commissioner, his two assistants, and two of the four members of the advisory council shall be physicians who are expert in the treatment of the mentally ill. An appropriation of $21,100 was contained in the act for expenses and salaries in the division of mental diseases during 1938. This includes $6,500 per year for a commissioner and $4,500 per year for an assistant commissioner. Members of the advisory course will not receive a salary, but will be reimbursed for traveling expenses.

H.B. 736, introduced in the House of Representatives, November 29, proposes the creation of a State Building Commission of three members, to be appointed by the Governor, at an annual salary of $5,000 per year each, to provide a building program for the Department of Welfare. The bill carries an appropriation of $100,000 for salaries, expenses, etc., of the Commission and $1,000,000 for land and new buildings during 1938.

Appointed to Board

Dr. C. I. Kuntz, Fremont, has been appointed a member of the Board of Trustees of the Ohio Soldiers and Sailors Orphans' Home at Xenia, by Governor Davey. He will serve until July 1, 1938, the end of the unexpired term of Paul F. Dye, Urbana, who resigned. Dr. Kuntz is president of the Sandusky County Medical Society.

CAREFUL INVESTIGATION OF COLLECTION AGENCIES ESSENTIAL, EXPERIENCE SHOWS; PITFALLS WHICH SHOULD BE AVOIDED

INQUIRIES from members received at the Headquarters Office of the Ohio State Medical Association indicate that some collection agencies are taking advantage of the present unsettled condition of business to set up their solicitation for physicians' accounts.

As pointed out in many previous issues of *The Journal*, physicians should be wary of glib salesmen with high-powered collection schemes. The physician should in the first instance be his own bill collector. If this efforts prove futile, it may be necessary for him to select some third party to enforce payment of overdue accounts. It is in making this selection that many physicians come to grief.

Some of the large county societies either have a collection department or are affiliated with an agency which handles collections on a satisfactory basis. In such an arrangement, under professional control, an effort is made to retain for each physician the respect, confidence and good-will of all those who owe him for services.

In smaller cities and counties where such facilities are not available, the best results in collecting delinquent accounts are ordinarily obtained by local attorneys or local collection agencies. Firms or persons with whom the physician is personally acquainted, whom he can trust, and whose collection technique can be checked frequently, are usually the safest to deal with.

If a physician decides to make use of a nation-wide agency, he must proceed cautiously. There are some good nation-wide collection agencies, and some that are unreliable.

IMPORTANT POINTS TO REMEMBER

Based on unfortunate experiences of physicians who have been victimized by unscrupulous collection firms, the following factors should be considered carefully before any kind of a collection agreement is reached:

1. Collection contracts are usually unnecessary. The head of a prominent collection agency recently said, "Tell doctors if someone wants them to sign something in order to have their accounts collected, look out".

2. Beware of the high-pressure sales talk of a clever solicitor. Remember that he is paid a certain amount for each account he obtains for collection. He has nothing to do with collecting the accounts, and he gets his fee whether or not collection is made.

3. Much of the sales promotion literature of collection agencies is in about the same class as testimonials for patent medicines.

4. References, endorsements, credentials, etc., used by solicitors should be verified. Names of reputable and well-known physicians have been used as references without their knowledge or consent.

5. Methods used by any agency should be investigated by the physician. Objectionable, strong-arm collection technique may not only result in no collections, but cause repercussions which will be harmful to the physician's reputation in the community.

6. A high-sounding and imposing firm name should carry no weight. Some collection agencies change their names each year.

7. Any company whose office is in a distant state bears scrutiny. Disputes between the physician and the firm over collections are difficult to settle by mail, especially when the firm has the money.

BAD FEATURES ENUMERATEED

Unusually bad features noted in the purchase agreement of one company whose services proved disastrous to a physician, were:

> Granting of full authority to the company to settle, collect, adjust and act as attorney-in-fact for the physician in handling the accounts. This would give the company power to take court action and perform all manner of "special" services, at considerable cost to the physician;
>
> A docket fee must be paid on each account, regardless of whether any collections are made;
>
> Charging a larger fee for accounts collected in installments than for those collected in full. thus encouraging installment collections;
>
> Assignment of authority to the company to endorse for deposit and collection, commercial paper received from all debtors;
>
> Provision that payments made direct to the physician shall be turned over to the company and on which commissions must be paid.

PLEASE FILL OUT QUESTIONNAIRE

The Headquarters Office at Columbus would like to accumulate information concerning collection agencies operating in Ohio. Physicians who have had experience, either good or bad, with such firms are requested to fill in the questionnaire appearing on the opposite page and mail it to the State Headquarters Office, 1005 Hartman Theater Building, Columbus. All information received will be considered confidential. If members will respond to this request, the State Association will be in a position to furnish advice and data to physicians desiring information on particular collection agencies.

CONFIDENTIAL REPORT ON COLLECTION AGENCIES

Fill Out and Mail to Headquarters Office, 1005 Hartman Theater Building, Columbus, Ohio.

1. Name and address of company (or companies) used _____

_____

2. Were services satisfactory? _____
3. If so, why? _____

_____

_____

_____

_____

4. If not, why? _____

_____

_____

_____

_____

5. What was the schedule of collection fees? _____

_____

6. Were remittances on collections made promptly to you? _____
7. Was a fee charged for each account whether or not any collection was made? _____. If so, how much? _____
8. Were you notified by the collection agency prior to any legal action against a debtor? _____
9. What percentage of the gross amount turned over to the company for collection did you receive? _____
10. Do you approve of the collection methods used by this agency? _____

IF YOU HAVE A COPY OF THE CONTRACT OR SALES LITERATURE USED BY THIS COMPANY, PLEASE SEND THEM FOR STATE ASSOCIATION FILES.

(Name) _____ M.D.,

(Address) _____, Ohio.

INFORMATION FURNISHED BY YOU WILL BE TREATED AS STRICTLY CONFIDENTIAL.

Do You Know - - -

Membership in the Ohio State Medical Association as of December 15, 1937, was 5,941, the largest in the history of the Association, and 313 more than on December 31, 1936.

* * *

Many enrollees in C.C.C. throughout Ohio have been inoculated with anti-pneumonia serum as part of a nation-wide experiment. Submission to the inoculation is on a voluntary basis.

* * *

Administration of affairs of University Hospital, Columbus, is governmental rather than proprietary, and therefore the hospital cannot be sued, the Court of Common Pleas of Franklin County, held recently in sustaining a demurrer of trustees of Ohio State University to a $5,000 suit filed by a patient who alleged she was burned by a hot solution while undergoing treatment at the hospital.

* * *

Dr. Harry Goldblatt, Cleveland, professor of experimental pathology, Western Reserve University School of Medicine, is one of three physicians who play a part in the latest March of Time movie, "The Human Heart".

* * *

The Ohio Public Health Association recently elected Dr. J. A. Carter, Batavia, health commissioner of Clermont County, as a director to succeed the late Dr. E. R. Hiatt, Troy.

* * *

In 1936, there were 30,018 cases of diphtheria reported in the United States, with 2,938 deaths; and 4,523 cases of poliomyelitis, with 723 deaths.

* * *

A trust fund of $1,000,00 has been given to Children's Hospital, Pittsburgh, for "perpetual research in the causes, treatment and cure of diabetes in the youth of the Pittsburgh area", by Miss Emily Renziehausen. In addition Miss Renziehausen has given an 11 acre farm as a site for a home for convalescent children.

* * *

In an effort to improve the standards of broadcasting, the Canadian Broadcasting Corporation has ordered that an article marketed under the Proprietary or Patent Medicine Act or the Food and Drugs Act may not be broadcast until it has been approved by the Department of National Health.

* * *

A booklet of accepted apparatus of the Council on Physical Therapy of the American Medical Association can be obtained free of charge by addressing Howard A. Carter, secretary of the Council, 535 N. Dearborn St., Chicago, Illinois.

Dr. Morris Fishbein has suggested that the American Medical Association stimulate the development of a corporation, not for profit, to administer patents in the medical and health fields and license firms to manufacture products under the patents.

* * *

The New York Polyclinic Medical School and Hospital has added the following to its staff: Dr. Thomas G. Tickle, professor of otolaryngology; Dr. David H. Jones, clinical professor of bronchoscopy, and Dr. Ernest E. Smith, adjunct professor of roentgenology.

* * *

The St. Louis Medical Society has entered suit to restrain the Missouri Pacific Railroad Hospital Association and similar corporations from maintaining hospitals and physicians for employees, alleging that such an arrangement constitutes the corporate practice of medicine.

* * *

The number of illegitimate births in Ohio in 1935 was 2,464, as compared with 2,436 in 1934, and 2,449 in 1933. The number of illegitimate babies per 1,000 live births in Ohio was 25.6 in 1935. South Carolina, with a percentage of 104.8 per 1,000 live births led the nation during 1935, while Utah was low with only 9.1 per 1,000.

* * *

A study of rheumatism will be undertaken in a new clinic to be established at the University of Michigan Hospital by the Rackham Fund, from which $10,000 will be available annually for several years.

* * *

Members of the Academy of Medicine of Cleveland have organized a male chorus. The songsters made their debut at the Academy's annual Christmas Dance, December 18.

* * *

While Dr. Allan R. Dafoe, the Dionne quintuplets' physician, was appearing as a guest of the Obstetric Society and the Medical Women's Club of Cincinnati recently, he was commissioned an honorary member and consultant of the staff of the Bureau of Child Hygiene, State Department of Health, by Governor Martin L. Davey.

* * *

Showing a striking growth in the magnitude of the state's business, a recent report of the State Auditor's office revealed that in 1921 that office issued 283,262 warrants totaling $47,808,266.16, and in 1936 issued 2,138,206 warrants totaling $262,916,384.76.

CHILLICOTHE IS NEXT CENTER FOR REGIONAL POSTGRADUATE LECTURES; OPENING SESSION ON THURSDAY, FEBRUARY 3

CHILLICOTHE has been selected as the center in South-Central Ohio for presentation of Course No. 1, Ohio State Medical Association Regional Postgraduate Lectures.

The first session will be held Thursday evening, February 3, starting at 7 P.M. at the Elks' Home, Chillicothe. Sessions will be held subsequently on the following Thursday evenings: February 17, March 3, March 17, March 31, April 14, April 28, and May 19. An interval of three weeks instead of two weeks is provided in May to avoid a conflict with the Annual Meeting of the State Association at Columbus, May 11 and 12.

The Regional Postgraduate Lectures will be presented in that part of the state, **known as Region B**, for the special benefit of members of the State Association practicing in the following counties, which compose Region B: Adams, Athens, Brown, Clermont, Clinton, Fairfield, Fayette, Franklin, Gallia, Highland, Hocking, Jackson, Lawrence, Meigs, Pickaway, Pike, Ross, Scioto and Vinton.

NO REGISTRATION FEE

There will be no registration fee. Admission will be by State Association membership card. All members of the State Association regardless of location are eligible to attend.

Lecturers for the course of addresses in Region B (Chillicothe) have not been selected by the Committee on Education and the Sub-Committee on Regional Postgraduate Lectures. However, these committees will be prepared to announce the names of lecturers in the near future and a complete program will be announced in the February issue of *The Journal* and in special bulletins to all members of the 19 counties in the Region.

Subjects identical with those which have been and are being presented in the course of Regional Postgraduate Lectures in Region A, Northwestern Ohio (Findlay, and Defiance) will be covered namely: anatomy and physiology of the heart, causes of heart disease, general problems of cardiac failure; rheumatic heart disease; intestinal obstruction; infections of the urinary tract; prenatal and postnatal care, management of pregnancy; diagnosis and treatment of early syphilis; common lesions of the cervix, differential diagnosis, preventive measures and treatment; scarlet fever; pneumonia; clinical aspects of tuberculosis in infancy and childhood; chronic arthritis—medical aspects and surgical aspects; principles of treatment of diabetes; common psychoses; cancer of the breast; fungous and pyogenic infections of the skin.

SIMILAR TO COURSE IN REGION A

The lectures will consume 45 minutes each. A general discussion period will close each session. Lectures will be practical talks, with special emphasis on diagnosis and treatment, clinical experiences and case reports. Every effort will be made by lecturers to present useful and practical suggestions which the average physician can use in his everyday practice.

The general setup for the course in Region B (Chillicothe) which will include eight sessions with two lectures at each session, will duplicate in most respects the course which opened October 21 in Northwestern Ohio and will close February 3. Readers of *The Journal* no doubt are quite familiar with this new project of the Ohio State Medical Association inasmuch as several articles have appeared from time to time in *The Journal.* (September, 1937, issue, page 1025; October, 1937, issue, page 1134; November, 1937, issue, page 1253; and December, 1937, issue, page 1364).

Incidentally, the attendance at the sessions in Findlay and Defiance has been unusually good, averaging about 150 per session, and reports from that part of the state indicate that members who have attended the lectures have been well pleased and have found the addresses beneficial.

DR. MERKLE GENERAL CHAIRMAN

Dr. A. E. Merkle, Chillicothe, secretary of the Ross County Medical Society has been designated by the Committee on Education and Sub-Committee on Regional Postgraduate Lectures, as general chairman on local arrangements. Dr. Merkle will be assisted in promoting interest and attendance throughout Region B by the following Regional Committee on Arrangements: Dr. O. T. Sproull, West Union; Dr. C. R. Hoskins, Athens; Dr. George P. Tyler, Jr., Ripley; Dr. J. M. Coleman, Loveland; Dr. V. E. Hutchens, Wilmington; Dr. C. W. Brown, Lancaster; Dr. J. F. Wilson, Washington C. H.; Dr. Judd Wilson, Columbus; Dr. Milo Wilson, Gallipolis; Dr. W. B. Roads, Hillsboro; Dr. M. H. Cherrington, Logan; Dr. J. J. McClung, Jackson; Dr. William A. French, Jr., Ironton; Dr. R. E. Boice, Middleport; Dr. V. D. Kerns, Circleville; Dr. A. M. Shrader, Waverly; Dr. W. M. Singleton, Portsmouth, and Dr. H. D. Chamberlain, McArthur.

Invitation of the Committee on Education and the Sub-Committee on Regional Postgraduate Lectures to conduct the course of lectures in South-Central Ohio was considered and accepted

at a preliminary conference held at Chillicothe on December 9 and attended by representatives of counties in the Region. Dates and general arrangements were agreed upon at that meeting which was attended, in addition to county representatives, by Dr. I. P. Seiler, Piketon, Councilor of the Ninth District; Dr. C. C. Sherburne, Columbus, Councilor of the Tenth District; Dr. L. N. Jentgen, Columbus, member of the Sub-Committee on Regional Postgraduate Lectures, and the Executive Secretary and Assistant Executive Secretary.

Sessions in Region A Draw Well; Coming Lectures Listed

The practical talks being presented at the Regional Postgraduate Lectures in Region A, Northwestern Ohio, have resulted in a sustained interest of the physicians of that section in the Findlay and Defiance meetings. Cold weather has only slightly affected the attendance. At the meeting in Findlay, November 18, despite bad weather, 117 physicians gathered at the Elks' Home to hear Dr. Loyal E. Leavenworth, Canton, speak on "Prenatal and Postnatal Care: Management of Pregnancy", and Dr. Harold N. Cole, Cleveland, discuss "Diagnosis and Treatment of Early Syphilis".

The fourth session at Defiance, December 2, was attended by 133 physicians. Addresses were made by Dr. William H. Weir, Cleveland, on "Common Lesions of the Cervix: Differential Diagnosis; Preventive Measures and Treatment"; and by Dr. James G. Kramer, Akron, on "Scarlet Fever".

On December 16 at Findlay, Dr. Julien E. Benjamin, Cincinnati, discussed "Pneumonia", and Dr. Waldo E. Nelson, Cincinnati, spoke on "Clinical Aspects of Tuberculosis in Infancy and Childhood".

REST OF THE PROGRAM

The program for the remainder of the course in Region A follows:

January 6—Defiance — "Chronic Arthritis—Medical Aspects", Dr. A. B. Brower, Dayton; "Chronic Arthritis—Orthopedic Aspects", Dr. William R. Hochwalt, Dayton.

January 20—Findlay—"Principles of Treatment of Diabetes", Dr. Henry J. John, Cleveland; "Common Psychoses", Dr. Louis J. Karnosh, Cleveland.

February 3—Defiance—"Cancer of the Breast", Dr. John W. Means, Columbus; "Fungous and Pyogenic Infections of the Skin", Dr. Claude B. Norris, Youngstown.

Sessions will start at 7:00 P.M. Meetings in Defiance will be in the High School Auditorium and the Findlay meeting in the Elks' Home.

Maternal and Infant Health Confab to be Held in Washington, January 17-18

The Children's Bureau, U. S. Department of Labor, has called a conference on "Better Care for Mothers and Babies," to be held in Washington, January 17 and 18. Representatives of various professional groups and national organizations interested in maternal and infant health and welfare have been invited. They include the American Medical Association, American Academy of Pediatrics, American College of Surgeons, American Committee on Maternal Welfare, American Federation of Labor, American Public Health Association, General Federation of Women's Clubs, National Grange, National Federation of Business and Professional Women's Clubs, National Congress of Parents and Teachers.

In calling the conference, Katherine Lenroot, chief of the Children's Bureau, stated that the number of maternal deaths due directly to pregnancy and childbirth in the United States in 1935 was 12,544. Additional deaths of pregnant women due directly to other primary causes raised the total number to 14,296. The number of stillbirths in 1935 was 77,119, and the number of babies dying in the first month of life as the result of causes arising during pregnancy or at time of delivery was 56,262.

The announced purpose of the meeting is to canvass in a broad way the resources now available and the work now being done in behalf of mothers and babies throughout the country through the cooperative efforts and under the leadership of the medical profession, public health officials, nursing organizations, professional and lay groups and interested individuals.

Among the examples cited by Miss Lenroot as to what can be accomplished by adequate maternal care was that of the Cleveland Child Health Association which in 1936 reported that 2,595 women, both private and clinical patients, attended special classes for prenatal care. Maternal mortality rate of this group was 7.7 per 10,000 births as compared with 38 per 10,000 for the city of Cleveland.

COMING MEETINGS

Ohio State Medical Association, Columbus, May 11-12.

American Medical Association, San Francisco, June 13-17.

American College of Physicians, New York, April 4-8.

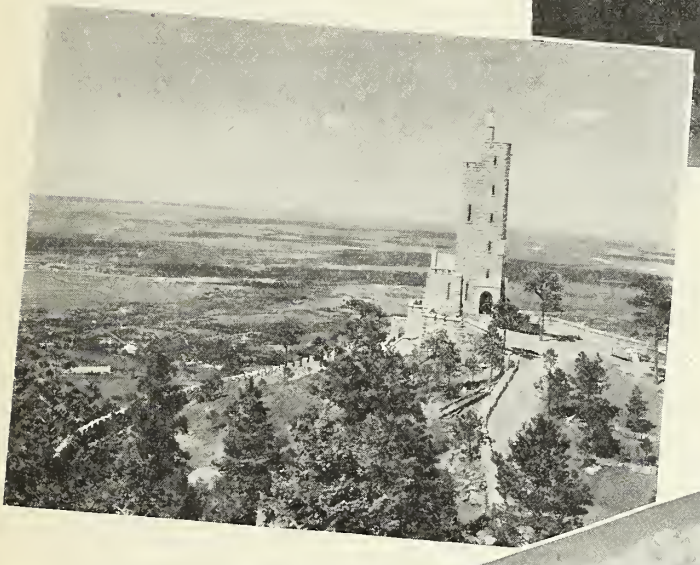
American College of Surgeons, New York, Oct. 17-21.

American Public Health Association, Kansas City, Oct. 25-28.

Tri-State Medical Association, Findlay, April 12.

THREE OF THE MANY SCENIC "WONDERS" OF THE WEST TO BE VISITED BY THE OHIO-A. M. A. SPECIAL TRAIN NEXT JUNE

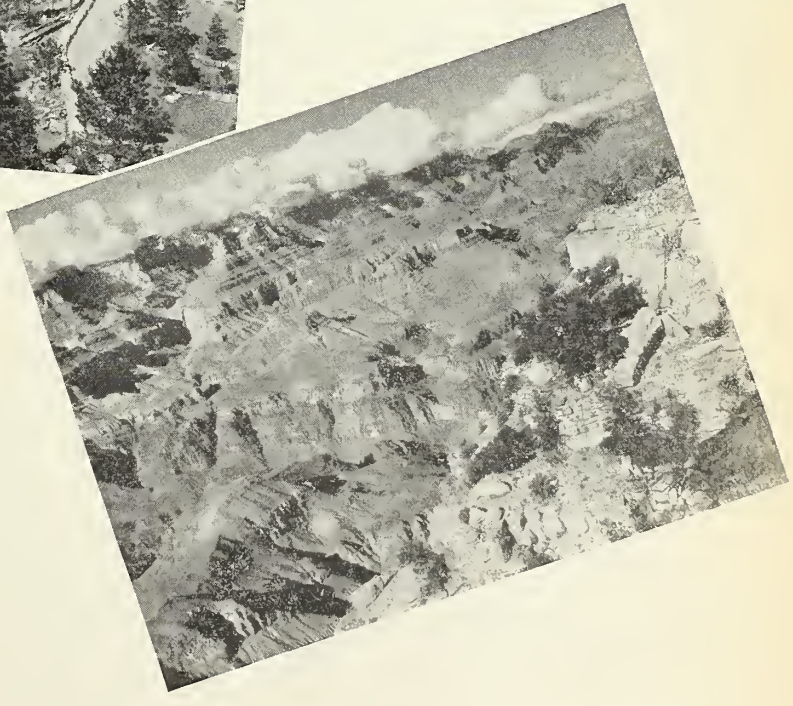
Below — Famed Will Rogers' Shrine of the Sun, at Cheyenne Mountain, Colorado Springs.





Above — Pike's Peak at Colorado Springs—First Stop on Official Tour.

Right—Grand Canyon, One of the Great Natural Wonders of the World.



ABOVE are views of three of the many Western beauty spots and scenic wonders which will be visited by Ohio physicians and their families who will be fortunate enough to be aboard the Ohio State Medical Association Special Train to the 1938 Session of the American Medical Association at San Francisco next June. (Watch for details in an early issue of *The Journal.*)

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Manifesto Circulators Cool Off; Two Typical Answers Are Quoted

Activities of the so-called "Committee of Physicians", of which Dr. John P. Peters, New Haven, Conn., is secretary, and of another small group of physicians, composed of Dr. E. S. Kilgore, et al., San Francisco, have lost much of their original pep and zeal during the past 30 days.

We have no desire to prolong the discussion but can't resist citing two quotations which, in our opinion, exemplify in a way the attitude of most individual physicians and medical societies in Ohio regarding the solicitations for support made by these unofficial groups.

One Ohio physician who represents a cross-section of the Ohio profession answered the inquiry of Dr. Kilgore as follows:

"While the proposals in your letter of a few days ago contain much of merit, I do not feel that I am qualified at this time to sign same for publication, therefore I do not wish you to use my name. There has been so much discussion pro and con, in medical meetings recently, that I rather doubt the advisability of a group presenting such proposals without the sanction of some recognized medical association. I feel that something should be done along the lines proposed by you and your confreres, but I feel that if we just have a little patience, the medical associations will solve these problems, and not give the lay public an opportunity to say that there is dissention in our own ranks. I believe that the average physician and surgeon, who is busy in his practice, does not have time to go into all of the details involved, as do the full-time representatives of our medical organizations, and that we should leave this matter in their hands."

In other words, the physician who wrote the above believes that such questions can best be handled by official medical societies in which all members have a voice and the freedom of expressing whatever opinions they may have on any subject.

Here is the way the Council of one Ohio county medical society re-acted:

"Without committing ourselves or our society as individuals to any theories or methods regarding the mooted subjects of medical care, we declare it to be the sense of the Council that whatever action as may be taken must be developed, promulgated and supported by the American Medical Association and the Ohio State Medical Association."

In conclusion, it is of interest to note that reports from reliable sources indicate that more than 100 of the original 430 signers of the manifesto issued by the "Committee of Physicians" have issued retractions and requested removal of their name from the list of approvers.

Hotel Reservations for 1938 A.M.A. Session Should Be Made Now

Reports from San Francisco indicate that hotel reservations for the 1938 Session of the American Medical Association there next June 13-17 are going like hotcakes.

Ohio physicians who are planning to attend that session should send applications for reservations immediately. Applications should be mailed to Dr. Frederick C. Warnshuis, chairman, Sub-Committee on Hotel and Housing, 450 Sutter Street, Suite 2004, San Francisco.

Physicians who are planning to make the trip on the Ohio-A.M.A. Special, plans for which have been described in this and recent issues of *The Journal*, should not let that deter them from making hotel reservations direct through Dr. Warnshuis. The all-inclusive feature of the Ohio-A.M.A. special (complete data will be announced in an early issue of *The Journal*) will not include any expenses at San Francisco and **no hotel reservations in San Francisco will be made by the State Headquarters Office** which is handling the special train details.

Mail your request for hotel accommodations at San Francisco immediately to be sure of getting the kind of accommodations you desire.

Newsweek forecasts that Warner Brothers, in cooperation with the American Medical Association, are planning a film "to expose quack doctors and remedies". Without the heart-throbs and S. A., we hope.

"Elixir" Deaths Spur Move to Put Teeth In Federal Drug Statutes

The extensive publicity which followed the tragic deaths of 73 persons from the use of elixir of sulfanilamide manufactured and sold by the S. S. Massengill Company, Bristol, Tennessee, may result in effective food and drug legislation — something which the medical profession has been advocating for many years.

In response to a resolution presented to the Congress by Senator Copeland of New York and Representative Chapman of Kentucky, Secretary of Agriculture Wallace on November 26 issued a report on the tragedy. Pointing out that the fatal elixir was rushed on the market without adequate tests, and that the only test made was for flavor,

HAVE YOU PAID YOUR 1938 MEMBERSHIP DUES?

Did you see the little red card tucked away between pages 1356 and 1357 of the December, 1937, issue of The Journal? It was placed there for a purpose—to remind every member that 1938 State Association membership dues would be due on or before January 1, 1938. Unless you heeded the warning by submitting your dues immediately to the Secretary-Treasurer of your county medical society, you had better take prompt steps to do so. You cannot afford to let your membership lapse. Dues for 1938 are $5.00.

Prompt payment of dues will insure your receipt of the following important benefits and services (among many) which you cannot afford to be without: Continuous membership in your county medical society, Ohio State Medical Association, and American Medical Association. Only members can be fellows of the A.M.A. Subscription for and receipt of The Ohio State Medical Journal each month. Right to attend and participate in meetings of your county society, Annual Meeting of the State Association, district meetings, and Regional Postgraduate Lectures. Use of the special services and facilities offered by the State Headquarters Office. Preservation of professional standing and Class A listing by Industrial Commission, hospitals, insurance companies, special scientific and professional societies, the courts, army, navy and governmental medical units, and postgraduate schools of various medical colleges.

the report concluded with four recommendations as follows:

1. License control of new drugs to insure that they will not be generally distributed until experimental and clinical tests have shown them to be safe for use. The definition of what constitutes a new drug should include (a) substances which have not been used sufficiently as drugs to become generally recognized as safe, (b) combinations of well known drug substances where such combinations have not become generally recognized as safe, and (c) well known drug substances and drug combinations bearing label directions for higher dosage or more frequent dosage or for longer duration of use than has become generally recognized as safe.

Exemption should be made for new drugs distributed to competent investigators for experimental work. A board of experts should be provided who will advise the Secretary of Agriculture on the safety of new drugs.

2. Prohibition of drugs which are dangerous to health when administered in accordance with the manufacturer's directions for use.

3. Requirement that drug labels bear appropriate directions for use and warnings against probable misuse.

4. Prohibition of secret remedies by requiring that labels disclose fully the composition of drugs. Many foreign countries now impose this requirement. Many drugs manufactured in the United States are exported to such countries under labels bearing such disclosure. The same drugs are sold to our citizens under labels that give no hint of their composition.

On December 1, Senator Copeland introduced a bill in the United States Senate (S. 3073), which proposes to provide that no person shall introduce or deliver for introduction into interstate commerce any drug composed, in whole or in part, of any substance or combination of substances, which substance is not generally recognized as safe for the use in the dosage and with the frequency and duration prescribed, recommended or suggested in the labeling thereof, unless the packer of such drug holds a notice of a finding by the Secretary of Agriculture that such drug is not safe for use. To enable the secretary to make a finding on any such drug the packer must submit (1) full reports of investigations which have been made to show whether or not the drug is safe for use; (2) a full list of the articles used as components of such drug; (3) a full description of the methods used in, and the facilities and controls used for, the manufacture, processing and packing of such drug; (4) a full statement of the composition of such drug; (5) such samples of such drug and of the articles used as components thereof as the secretary may require, and (6) specimens of all proposed labeling for such drug.

To aid and advise him in making such finding the secretary is authorized to create a board consisting of one representative from each of the following organizations: United States Public Health Service, American Medical Association, American Institute of Homeopathy, United States Pharmacopeial Convention, American Pharmaceu-

tical Association, and the Food and Drug Administration of the Department of Agriculture.

The American public certainly deserves protection from incompetent manufacturers of drugs, whether the products are sold directly to the public as patent medicine or exploited to members of the medical profession who do not restrict their drug prescriptions to products approved by the Council on Pharmacy and Chemistry of the American Medical Association. Congress should lose no time in remedying the evils which the report of the Secretary of Agriculture reveals. Any respectable drug manufacturer should be willing to support such reasonable restrictions as Senator Copeland's bill proposes.

Laxative manufacturers are having difficulty getting herbs and roots for their products because of the Sino-Japanese War which has curtailed imports from China. With the ill-effects of some laxatives in mind, one might observe that this is the only good to date which has come from that war.

The Journal Starts Another Year; It Needs Your Assistance

Volume 34 of *The Ohio State Medical Journal* makes its debut with this issue. We hope readers of *The Journal* will approve the changes which have been made in its appearance.

Although those actively in charge of producing *The Journal* each month are quite keen to keep its format fresh, up-to-date and attractive, they are especially anxious to maintain the high standard of its content. Efforts will be directed not only toward maintaining the high standard of the material appearing in *The Journal* but also toward improving the quality and tone of the publication. No matter how good a publication may be it must strive constantly to better itself and make itself more useful.

During the past year *The Journal* has received exceptional support from a large number of members of the State Association. Its staff appreciates the services which have been rendered by contributors and the loyalty of the membership as a whole. In the final analysis, these have made possible the production of a journal beneficial to all members and of which they can be proud. If accorded the same degree of support during the coming year, *The Journal* will be able to maintain its good record. If a greater number of members take an active interest in this important function of their State Association, *The Journal* will be able to take additional forward steps.

This point should not be overlooked by each member: *The Journal* is his journal and designed to serve him, individually, as well as all members collectively. Like every collective endeavor, its success is in ratio to the initiative and effort displayed by those involved in the undertaking.

No physician can ever be said to have finally mastered his profession. There is always something new to learn. He must keep eternally studying if he is to keep abreast of the time. There is probably no other profession in which so much work of this sort is required of the conscientious practitioner. His education never ceases.—Rhode Island Medical Journal.

A Book on the Business Side of Medical Practice Every Doctor Should Read

There are times in the career of every physician, old or young, when he must recognize that there is something more to the practice of medicine than the diagnosis, treatment and prevention of disease.

For example, in this day and age, every thinking physician realizes that he must keep himself informed on and interested in public affairs. Likewise, he should realize that organized effort as represented by medical organization—local, state and national—afford the medical profession its greatest protection and the most effective medium for presenting the viewpoints of the profession, as well as the best means of providing individual physicians with opportunities for self-improvement.

There is another factor which deserves consideration, namely, the business side of the practice of medicine. Every physician, whether he likes it or not, must possess some knowledge of sound business practices. Unfortunately, a considerable number of medical school graduates possess little or no business training prior to starting practice. The average medical student has not had time to acquire such knowledge. After he begins active practice, the young physician concentrates time and thought to the practice of medicine, and rightfully so. Nevertheless, changing times have made it essential that occasionally every physician interest himself in business problems arising in his daily practice.

The best way for the average physician to acquire information on efficient business methods which may be applied to his own affairs is by absorbing suggestions and experiences set forth in reliable reference works on such subjects.

One of the best which we have had an opportunity to review is "The Business Side of Medical Practice", written by Theodore Wiprud, executive secretary at The Medical Society of Milwaukee County, Wisconsin (W. B. Saunders Company, Philadelphia, 1937, 177 pages, $2.50). Members interested in bringing themselves up to

date on methods of organizing and managing the business details of their everyday work would get a wealth of information and recommendations by investing $2.50 in Mr. Wiprud's book.

The following headings and summaries of some of the more important chapters will give readers some idea of the scope and value of the book:

Office Management—This chapter deals with arrangements and equipment of the doctor's office; office routine; personnel.

Necessary Financial Records—As the title implies, suggestions are offered with respect to bookkeeping methods and material; the "Daily Register"; receipts and disbursements record; property ledger; patients' accounts record; income tax reports, etc.

Case Records and Filing—Valuable tips regarding the value of adequate case records, how to make them, and file them will be found in this chapter, together with illustrations of practical record forms.

Proper Handling of Patients' Accounts—This is one of the highspots of the book. It offers advice which every physician would find useful. Points covered include: Monthly statements, collection letters, settlement of accounts, collection agencies, collection rules, etc.

Doctors' Bills and Laws—The author does not make a legal discussion of the relation of physician and patient, liability for payment of doctor's bill, methods of enforcing payment, obtaining a judgment, and records in relation to legal procedure, but offers just enough authentic information and presents a sufficient number of citations to give the physician some tips as to how he can avoid legal difficulties and know how to proceed in case he has to initiate litigation.

The Charity Patient—The most important point in this chapter is the policy suggested for dealing with the charity patient in private practice, especially the reference that the physician's liability for negligence is in no way affected by the fact that he is giving his services gratis.

Investments—Physicians who have been washed clean and caught in the wringer as a result of poor investments will be interested in this chapter and may get a few valuable tips. The rules which a physician should observe in making investments are particularly pertinent and timely.

The Doctor in Court—This is another valuable section of the book. Every physician is a potential witness. For that reason he should know something of court procedure and what is required of him as a witness. Competent coverage is given to these subjects: When a physician may be called as a witness, manner of giving expert testimony, rules which he should follow while on the witness stand, evidence, privileged communications, ordinary testimony as distinguished from expert testimony, hypothetical questions, and malpractice.

Preparation of a Manuscript—Today's alert physician will want to try his hand occasionally at contributing to medical literature. Many who try fail because they haven't studied the fundamentals of writing. Excellent suggestions are offered in this chapter under these headings: Defects in manuscripts, style and word usage, value of methodical habits, how a manuscript is prepared, correcting proofs, illustrations, bibliography, etc.

Public Speaking—Members of the medical profession are being called upon more and more to address lay gatherings. For ages physicians themselves have added to their store of knowledge by listening to addresses and lectures by their colleagues. Obviously, therefore, medical men should strive for proficiency in public speaking, whether before lay or scientific groups. Too few physicians are skillful speakers. The author suggests what should be done in preparing an address, how to organize material, presents some of the fundamental rules of public speaking, when and how lantern slides and charts should be used, and, offers some timely observations about radio broadcasting.

Relations with the Press—Sound advice on the relationship which should exist between the profession and the press is presented, together with some pertinent suggestions as to how the individual physician can avoid complications and situations which might lead to disciplinary action.

Building a Practice—This chapter should be especially interesting and beneficial to younger physicians. It summarizes proper ways which can be taken by a physician to establish a practice. The question of choosing a location is discussed and the advantages and disadvantages of rural and metropolitan practices analyzed.

Several pages are devoted to such topics as the doctor and public affairs, conducting a meeting, duties of chairman, duties of secretary and treasurer, keeping meeting records, fee cutting and fee splitting.

In general, "The Business Side of Medical Practice" is a very worthwhile reference handbook and deserves a place in the library of every physician in private practice—especially the young physician who has not learned from actual experience many of the lessons covered in the book.

Those who read the feature article in the December 20 copy of Life regarding the campaign on pneumonia will be interested in the progress of the Ohio pneumonia campaign, summarized in this issue of *The Ohio State Medical Journal*.

Your County Society Secretary Deserves Your Active Help

Most of the county medical societies have elected officers for the ensuing year. These men will be loaded with great responsibility during the coming months and they will be expected to produce. We wonder if the members who casually cast their votes for this man and that man for official positions, realized while doing so that they were doing something more than bestowing what probably was a well-deserved honor on those particular men.

For example, we have in the mind the average county society secretary. Did you ever stop to think about what the secretary of your society (assuming he is an average secretary) does for you and your society during the course of a year? Would you want the job and responsibilities you have delegated to him? Would your society be

as good as it is if you didn't have an alert, aggressive and conscientious man as secretary?

After you have asked yourself these questions, ask yourself this one big question: "Am I giving the secretary of my society the support which he needs and deserves?"

It's easy enough to sit on the sidelines and let "the secretary" carry the ball and make all the tackles. But, who wants to be a bench-warmer and what fun is there in being one?

Seriously, medical organization is not and should not be a one-man show. Good as he may be, the county society secretary can't shoulder the entire load and shouldn't be expected to do so. Get behind him and give him your active assistance. If you don't some day he will buck and you may find yourself in his shoes, frantically sending out SOS signals. A good secretary is a real asset for every county medical society and one which should be preserved. An uncooperative and unresponsive membership is a headache for even a good secretary with insulated nerves and emotions.

According to his biographers, one of the factors that made Sir William Osler the Number One Physician of his time, was the fact that he traveled extensively, attending medical conventions both in this country and abroad. How much more do we, of lesser caliber, need the inspiration and knowledge gained in meeting with our colleagues.—Maine Medical Journal.

Society "Business" Is Important; It Is Too Often Neglected

There is an interesting clause in the by-laws of at least one county medical society of Ohio which either should be written into the by-laws of all societies or at least followed by all societies as an unwritten rule of procedure.

The clause referred to states that at least one meeting of the society each year shall be devoted to a discussion of business matters of interest to the members.

It is true that the primary purpose of medical organization is educational and scientific. At the same time, it is the function of medical societies to keep members informed on economic, social, governmental and legislative developments which are of direct interest to the profession as a whole and physicians as individuals. Also, it is important that physicians be given an opportunity to express their views on such questions so that officials and committees of their society will be better qualified to express the concerted viewpoint of the profession of that particular community.

As a matter of fact, we believe that every society should devote some time at every meeting of the society to a discussion of "business" matters, using the term in its broadest sense. An effort is made by the State Headquarters to keep all county societies posted on current developments through special bulletins, supplementing articles published in *The Journal* or issued prior to publication of information in the magazine. These bulletins should be discussed by the members. They are issued for a distinct purpose. Has your secretary or legislative committeeman been relaying the content of these bulletins to the membership of your society? If not, ask him to do so. This is one way to keep the entire membership enlightened on developments of importance and prepared to act when action is required.

As never before physicians should be alert to economic changes and be informed of medical legislation and of programmes and activities of lay organizations. The passive resistance of these things affecting medical practice is only a slow form of professional suicide.—Wichita Medical Bulletin.

Echoes From Abroad Show Why Profession Here Must Be Alert

Physicians who are naive enough to believe that the medical profession and the public would benefit through governmental control of medical service should heed the observations of their German and Czechoslovakian colleagues, quoted in a recent issue of *The New York State Journal of Medicine.*

Referring to proposed amendments in the social insurance laws, the German and Czechoslovakian Medical Associations issued a joint statement, an excerpt from which reads as follows:

"The medical profession certainly has a right to be heard regarding all these measures, which so deeply affect the professional, economic and social interests of medicine. In spite of this fact the physicians have been given no opportunity to present their suggestions or to express their needs and their desires with regard to this proposed legislation, except that here and there they have been permitted to express their opinion on a few points. . . .

"The profession has been given no opportunity during the preparation of these laws to contribute its medical experience and knowledge. We do not know just why the value of medical cooperation has been so little recognized or why it has gained the distrust of social-political circles, both official and nonofficial; nevertheless it is evident that this attitude has arisen and prevails at the present time. It is clear that the profession will not at this time be called on in the preliminary stages of social work or, at the best, it will be given only a formal recognition after much insistence on its part."

The plight of the profession in those European countries is of course influenced by factors which were clearly beyond their control; factors which do not exist in the United States—at least not yet.

However there is much evidence that certain

lay groups and politicians, who believe they know more about the practice of medicine and what is good for the health of the public than the medical profession, are attempting to produce in this country conditions similar to those existing in certain European nations.

In our opinion, the majority of the medical profession of this country are opposed to such activities and the ultimate results. That being the case, that majority must do everything within its power to mold the profession into a militant, aggressive, well-organzed group which can awaken the public to a realization that the welfare of the people is being used for bartering purposes and warn the people of the pitfalls of bureaucratic control of medical service.

A united front of that kind cannot be accomplished if the physicians of the country hesitate to assert themselves or listen to the plausible but deceptive proposals made by small minorities within the profession who seem to have an idea that medical progress cannot be accomplished unless supervision of medical and health services is delegated to an alphabetical bureau manned by brass-buttoned strawbosses.

Often it is not the lack of intelligence that is responsible for a child's academic failure but the lack of proper habits of eye movement in reading. —Hygeia.

Right of Hospital to Limit Staff to Doctors of Medicine

Right of the governing board of a hospital to exercise discretion in designating who may practice in the hospital was accorded additional support recently in a decision handed down by the Circuit Court of Flint, Michigan. In that decision, the court dismissed a motion filed by two osteopaths asking a court order allowing them to practice in the Hurley Hospital at Flint, and upheld the hospital board of managers in refusing them use of the hospital.

This question has been raised a number of times in Ohio where practitioners other than doctors of medicine have sought membership on hospital staffs. Ohio statutes are quite clear on the matter, granting hospital authorities or agencies responsible for the operation of hospitals, discretionary powers to make decisions for the best interests and welfare of the institutions.

In discussing this question recently, *Modern Hospital* made this editorial comment:

"Hence, the board of trustees of such an institution (government hospital) may decide what in their judgment is the safest practice to follow in the care of the sick and indigent. Even when statutes limit the free action of the boards of government hospitals in respect to the exclusion of cultists, more than one jury has protected the cause of the patient. The high standing of the hospital staff is the business of the board of trustees. It and it only may close the institutional doors to the quack and pretender."

This is sound reasoning. Hospital standards cannot be maintained if medical staff personnel is of a low grade. Staff standards cannot be maintained if practitioners of all types and sects are granted staff membership. Hospitals cannot receive approval and Class A rating from the American Medical Association and American College of Surgeons—important ratings, in our opinion—if they permit others than doctors of medicine to practice in the institution. Surely, no hospital management wants to take the risks involved in opening its doors to the unqualified.

Every physician is a member of the volunteer army of guardians of health in all its phases, private and public. He cannot afford to divorce his private practice from that of public health; for when he does so, other agencies are ready to displace him from even his private practice.— Journal of the Medical Society of New Jersey.

N. Y. Film Censors Go Goody-Goody; Ban Film "The Birth of a Baby"

Under an Albany, New York, December 7, dateline, the Associated Press carried the following article, which landed in the columns of a large number of Ohio newspapers.

"Public showing of 'The Birth of a Baby,' a sound picture, was prohibited today in New York state.

"Education Commissioner Frank P. Graves asserted that he had denied a license on grounds that the film was 'indecent, immoral and would tend to corrupt morals.'

"In his ruling upholding a decision of the motion picture division, Dr. Graves said that the picture is a 'medical treatise in pictorial form presented for the alleged purpose of enlightening prospective fathers and mothers.' "

The authenticity and accuracy of the above are assumed. That being the case we cannot resist a snicker. Not because the film was rejected for that will prove a big disappointment to the well-meaning physicians and others who have had a part in producing and promoting the showing of what, in our opinion, is an educational film of merit; but, because of the reasons given by the Empire State board for prohibiting public showings in that state.

Those who attend the movies regularly, or even occasionally, and who have had an opportunity to attend a preview of "The Birth of a Baby", will find it difficult to understand how any board of film censors can be inconsistent enough to ban the showing of a movie of this character for reasons enumerated by the New York board and

approve, repeatedly, films which are nothing more than unadulterated trash.

However, we may be too slow to keep up with the present-day code of morals, as interpreted by the New York film censors. We had a sneaking impression that educational projects and presentations—even movies—which would tell how to safeguard health and preserve human lives were good stuff for the younger generation. Apparently, we are in error. The new emphasis in education, as exemplified by some of the products of the movie industry (and approved by film censors), must be to teach modern youngsters how to be big-shot gangsters and Twentieth Century Casanovas, and to stimulate their romantic senses by showing candid-camera shots of the modern Gold Coast harems.

Those who produced "The Birth of a Baby", also must be old-fashioned, or they would have eliminated from the picture the shots which reveal that competent prenatal and postnatal care is a good thing for mothers and babies and substituted close-ups of bathing beauties and action scenes of bank robberies. Had this been done, we feel certain, there would have been no hitches and another remarkable contribution to posterity would have been accomplished. Oh for the life of a film censor! Just think what he gets to see gratis and before anyone has a chance to butt in and ring down the curtain.

There is no field that offers quite the challenge to the medical profession today as does that of geriatrics. Youth has many a defender; there are 4,119 physicians in America who specialize in pediatrics, but where is he who champions old age?—Will S. Horn, M.D., in Texas State Journal of Medicine.

Business Tips Which Physician Should Digest

"Oh, well, doctors are poor business men anyway."

This is the usual comment heard where laymen happen to be discussing physicians and their work.

If analyzed from a general point of view, the observation is an exaggeration. Some doctors conduct their affairs in line with sound business methods.

Why many physicians cannot keep their business transactions on a basis comparable to the average merchant's is that they are too darn busy and the very character of the practice of medicine does not lend itself to standardized business methods.

Yet, there is no good reason why the average physician should not fortify himself with some of the more simple methods of keeping accounts, making collections, working out financial agreements with patients, etc. Methods which can be adapted to his practice can be secured and in the long run would quickly pay for themselves.

Another angle which many physicians overlook is that of keeping their financial and business affairs in such shape that, in event of death, their families will be able to settle the estate with a minimum of difficulty and depreciation.

We recommend that every physician follow the procedures described by Dr. Allison E. Skaggs and Dr. Henry C. Black in one of their series of articles, "The Business Side of Medicine", appearing in *The Journal of the Michigan State Medical Society*, from which the following is quoted:

"While most doctors have made their will, comparatively few leave any definite instructions as to the method to be used in liquidating the practice in the event of their death. Any doctor who has had the unfortunate task of trying to straighten out the affairs of one of his deceased colleagues would certainly take the comparatively short time necessary, in his own case, to record all in one place that information which is not only valuable to him, but invaluable to anyone else who by necessity is forced to step in and take charge of liquidating his estate.

"The plight of the doctor's widow, still suffering from the shock of her loss, without accurate records of property values or liens against them, and trying to follow the well-meaning but varied advice of a dozen relatives and friends, is sad indeed and entirely unnecessary. Either as a part of the will or accompanying it should be definite instructions as to the sale of the practice, including drugs and equipment, and the liquidation of outstanding patients' accounts, as both will bring a much higher return immediately than after months of indecision.

"**Liquidation of Accounts**—Although the complete liquidation of patients' accounts will necessarily drag along for months and even years, prompt action in sending out statements and correspondence requesting definite arrangements for settlement will multiply by many times the amount that may eventually be collected from them. The regular monthly follow-up of all accounts is a routine the value of which is obvious, and if this correspondence is repeatedly ignored the services of a local bonded collection agency are indicated.

"**Sale of Practice**—The sale of a 'going concern' always brings more money than the equipment will bring for its salvage value, so naturally the practice should be sold as a unit, if possible, to a new man who would appreciate the initial advantage of continuing a practice rather than having to start a new one. Often drug or equipment salesmen know of young doctors looking for just such openings and can be of great help. Prompt action is, of course, imperative if such a

sale is to be made before the patients form the habit of turning elsewhere for medical care.

"Sale of Drugs and Equipment—Where sale of the practice as such has been for some reason impossible, the only thing left is to sell the drugs and equipment to whoever will buy for whatever they will pay, and again some of the more substantial drug and equipment salesmen can and usually will help out by selling these things at a fair price, less their commission, to various doctors of their acquaintances who they know have use for them. Usually the money received from such sales is disappointing as compared to the original purchase price, but this is to be expected.

"Competent Advisors—Since, to get the best results, many of these ideas must be carried out without delay it is well to specify along with the will that the doctor's widow may look to some trusted friend for immediate advice in carrying out their imperative details. Possibly it may be a business man, an experienced office girl, or a fellow practitioner whose business judgment is sound, but the essential thing is that the instructions specify in detail just what you would have done, how and by whom. A competent attorney, preferably the one drawing up the will or instructions, should also be consulted as to the legal rights of such an agent, both in drawing up such a document, and in the administration of it.

"Looking such a problem squarely in the face is to our mind one of the best things the doctor can do for his family, yet one of the easiest, and certainly one of the least expensive. Because it can be done 'anytime' it is very apt to be postponed. Don't put it off."

Procrastination, other than in the field of medicine, is a besetting sin of the doctor. This holds true even when he personally suffers from his own dilatoriness.—The New England Journal of Medicine.

Additional Comments on Sterilization Operations in Ohio

On page 1370 of the December, 1937, issue of *The Journal*, the question of whether a physician may legally perform a sterilization operation with the written consent of the patient was discussed.

Since then several competent legal authorities have reviewed the question and voiced opinions. The composite views expressed by those attorneys may be summarized as follows:

The laws of Ohio relating to crimes do not prohibit a physician to perform vasectomy upon any individual. It is well settled that there are no common law crimes in Ohio. Consequently, unless the General Assembly enacted a law making it a crime for a physician to perform vasectomy, the performance of such an operation would be no crime in this state.

The provisions of the General Code relating to the prevention of conception, which provide penalties in the event of violations, do not include the performance of such operation. Those sections are penal statutes, and, under a rule of statutory construction recognized by the Supreme Court of Ohio time after time, must be strictly construed in favor of the person charged with the violations. In 12 O. Jur. 55, the following text appears in connection with the construction of penal statutes:

"The statute should describe the act which is forbidden with reasonable certainty. A statute defining a crime or offense cannot be extended, by construction, to persons or things not within its descriptive terms, though they appear to be within the reason and spirit of the statute. Nor can a penal statute be extended by implication to cases not falling within its terms. Persons cannot be made subject to a statute by implication. Only those transactions are included which are within both its spirit and letter; and all doubts in the interpretation of a statute are to be resolved in favor of the accused. An act, to be punishable as a crime in Ohio, must be specifically embraced within the terms of some statute. Where a statute defining an offense designates one class of persons as subject to its penalty all other persons are deemed to be exempted therefrom."

In the absence of any law making it a crime for a physician to perform vasectomy upon an individual of sound mind with his consent, such an operation may be performed by a physician.

The above should not be interpreted by physicians as the final word on this important question. When confronted with this situation, a physician should take every necessary precaution. First, he should consult his own personal attorney. Second, he should be sure of his ground and have all pertinent facts mobilized. Third, he should be extremely careful to keep complete records of the case. Fourth, he should have consent and agreements by the patient and next of kin, in writing. Fifth, he should determine to his own satisfaction whether such an operation would be justifiable and sound medical procedure.

The question is moot and each case should be determined independently, in the light of specific facts and circumstances. Unless he is absolutely sure of his ground, a physician should follow the safe procedure and refuse to perform such an operation.

Reports Due Quarterly After January 1

Employers making returns under the old-age benefits section of the Social Security Act (employers of one or more persons), beginning January 1 may make information and tax returns on a quarterly instead of a monthly basis, as is now required. The change is being made to lessen the bookkeeping burden of maintaining Social Security records both in the case of employers and the Government.

HEALTH DEPARTMENT'S FIRST PNEUMONIA TYPING SCHOOL AT CINCINNATI PRODUCES 16 TECHNICANS TO AID CLINICIANS

AS part of the pneumonia control program of the State Department of Health an intensive one week's course in pneumococcus typing was given at Cincinnati General Hospital during November to 16 technicians selected by the department from representative sections of the state.

For the purpose of emphasizing the importance of the laboratory side of the pneumonia control program, a general description of the course may be of interest.

During the week each student was given an opportunity under expert supervision to observe and to demonstrate the characteristic Neufeld reaction in approximately 50 specimens in which many types of the pneumococcus as encountered in clinical cases were studied. Anyone thoroughly trained in the ramifications of pneumococcus typing can readily appreciate the amount of work which was involved, and the experience derived in the handling of so many specimens.

OUTLINE OF COURSE

The course centered around the study of the Neufeld reaction—training in distinguishing under varying conditions the typical encapsulated pneumococcus from other encapsulated organisms and artifacts. In addition sufficient time was given for the study of supplementary laboratory methods which are a necessary part of expert pneumococcus typing. These included animal inoculation and cultural methods together with demonstrations of conditions calling for the use of one or a combination of these methods. Emphasis was placed upon the need for a good microscope, preferably a binocular, and adequate microscope lighting.

At the end of the week each student was examined as to his proficiency on the basis of typing unknown specimens. Each one satisfactorily demonstrated his ability in this respect and is qualified to do expert pneumococcus typing.

VALUABLE AID TO CLINICIANS

Clinicians practicing in the districts where these and future trained typers are located are urged by Dr. Walter H. Hartung, State Director of Health, to avail themselves of this expert assistance. It is also understood as another step in the furtherance of the pneumonia control program that persons who are given this special training will at some near future time make a similar course of instruction available to technicians in their respective localities. By this means it is hoped to give every hospital and practitioner in the state a highly dependable typing service.

NAMES OF EXPERT TYPERS

In the meantime the State Department of Health expects to organize two or three additional classes for special training in pneumococcus typing. Following is a list by counties of the typers who attended the recent course in Cincinnati:

Ashtabula—Harold Smith, Medical Building Laboratory, Ashtabula.

Butler—Ann Ratz, technician, Ft. Hamilton Hospital, Hamilton; Bessie Keating, technician, Mercy Hospital, Hamilton.

Crawford—Robert Beck, laboratory technician, City Hospital, Bucyrus.

Darke—Clara Barstis, laboratory technician, City Hospital, Greenville.

Franklin—Mrs. G. A. Bole, Division of Laboratories, Ohio Department of Health, Columbus; Dr. H. Drayer, Health Department Laboratory, Columbus.

Hamilton—Dr. Wm. Moody, Bacteriological Laboratories, Health Department, Cincinnati.

Jefferson—Walter P. Kendall, Health Department Laboratory, Steubenville.

Lorain—R. P. Fowler, bacteriologist, Lorain County Department of Health, Oberlin.

Mahoning—D. R. Mellon, city chemist, Health Department, Youngstown.

Marion—Louise Halbedel, laboratory technician, City Hospital, Marion.

Scioto—Evelyn Edgington, laboratory technician, General Hospital, Portsmouth.

Shelby—Madeloyn Greiner, laboratory technician, Wilson Memorial Hospital, Sidney.

Stark—Louis Katonak, bacteriologist, Department of Health, Canton.

Washington—R. B. Reall, City Health Department, Marietta.

Attention is called to an article on "Pneumonia Control With the Aid of the Neufeld Test and Serum Therapy", by Dr. Hartung, in the February, 1937, issue of *The Ohio State Medical Journal*, pages 186-8, and one on "Progress of Pneumonia Control in Ohio", in the October, 1937, issue, page 1131, by Leo F. Ey, chief, Division of Laboratories, State Department of Health.

Medina—Dr. Irvin B. Kievit, Toledo, has been appointed health commissioner of Medina County.

Troy—Dr. Kurt C. Becker, Royal Oak, Mich., has been appointed health commissioner of Troy and Miami County.

LEGISLATURE VOTES FUNDS FOR PRESENT RELIEF NEEDS BUT IS DEADLOCKED ON 1938 PROGRAM; LONG SESSION EXPECTED

PURSUANT to a call from Governor Davey, the 92nd Ohio General Assembly convened in special session at Columbus on November 29. The purpose of the session, according to the Governor's proclamation, is "to consider relief, plus an urgently necessary deficiency appropriation bill and such other subjects as may be deemed proper and which will be opened for consideration by special messages".

As *The Journal* goes to press, the Legislature has provided for immediate relief needs, but no relief program for 1938 has been agreed upon.

FUNDS FOR PRESENT NEEDS VOTED

An appropriation of $1,000,000 from the state general revenue fund for immediate relief purposes was enacted December 14. This act gives the State Emergency Board complete jurisdiction over the allocation of funds to political subdivisions having the greatest present need. It is anticipated that this money will meet emergencies existing in some sections of the state, particularly the larger cities. These allocations will be in the form of loans to be repaid by deductions from whatever state fund is provided for 1938.

Other temporary poor relief measures enacted December 14 and 15, include bills to authorize counties to issue short term notes against anticipated surpluses in the utilities and selective sales taxes as of March 1 next, for poor relief purposes, and to permit counties to use unexpended balances in the poor relief fund and flood relief fund for immediate poor relief purposes. It is estimated that these three measures will make approximately $3,500,000 available throughout the state for immediate poor relief purposes. Unencumbered funds of the State Relief Commission amounting to $490,000 will also be made available for immediate distribution, if the Senate approves a bill to that effect which passed the House on December 15.

IN DEADLOCK ON 1938 PLAN

What the 1938 relief program will be, veteran legislative observers hesitate to predict. The plan suggested by Governor Davey contemplated a state appropriation of $7,000,000 to be matched dollar-for-dollar by local subdivisions. City officials, represented by the Ohio League of Municipalities, have urged a state appropriation of $12,000,000 with cities and counties being required to supply whatever funds over that are needed. Members of the Legislature from rural counties, most of whom can take care of relief without state aid, are insisting on some sort of a matching plan. The legislative hopper is kept full of ideas on the subject. Approximately 60 bills have been introduced in the House and 30 in the Senate, mostly on some phase of relief, in the four weeks the Legislature has been in session. Proposals for financing the program: Include re-enactment of existing utilities excise, beer, malt and admissions taxes; taxing tangible personal property on the basis of 100% assessed value instead of 50 per cent as at present; a graduated tax on chain stores, and so on, even a bill to create a State Wagering Commission to legalize and license all forms of gambling, including number-writing, sweepstakes and slot machines, the revenue to be devoted to poor relief.

UNOFFICIAL COMPROMISE DRAFTED

With the House of Representatives hopelessly deadlocked Speaker Uible on December 15 called a conference of 27 influential Democratic representatives, about equally divided between rural and urban members. Although the conferees did not bind themselves to vote for it, they agreed on a compromise program to be submitted to a caucus of all House Democrats and subsequently to the House.

The essential points of the compromise are: (1) increasing from $6,000,000 to $6,500,000 the amount of sales tax revenues appropriated for poor relief in 1938, for distribution among the counties, with the local subdivisions required to match state funds on the basis of 50 cents for each $1 granted them; (2) re-enactment of the one per cent utility excise tax and the allocation of the amusement, admissions, beverage, malt and wort tax revenues to poor relief, providing an additional $5,500,000, to be distributed among the counties without any matching requirement; (3) reduction in the majority vote required for the approval of special levies for poor relief and statutory welfare purposes from the present 65 per cent to 55 per cent or a bare majority; (4) enabling legislation authorizing counties or municipalities to levy a consumer's tax of not more than 3 per cent on utility services; (5) provision that delinquent taxes collected in excess of current budget and bond retirements be used for poor relief purposes.

MEDICAL SERVICES PROVIDED FOR

It is estimated that the relief program described above would make approximately $15,000,000 available for relief during 1938, without the enactment of new state taxes.

The feeling is quite general in the Legislature that administration of relief should be under local supervision, and that if a state relief director or commission is deemed necessary, it should be

merely for the purpose of allocating funds and gathering statistical data.

All programs suggested so far have included the furnishing of physicians' services wherever rendered as part of poor relief.

The majority sentiment of the General Assembly is to confine relief legislation to setting up a program which will meet the problem during 1938 and against revising or recodifying the permanent relief statutes which, members believe, is something which should be left to the next General Assembly, meeting in January, 1939.

Special messages from the Governor have opened up several other matters for legislative action, including amendments to the unemployment compensation and sales tax laws. Various special interests have had bills introduced under the guise of providing funds for poor relief. It looks as if it will be a long, hard winter in the State House.

Birth Certificates Must Be Filed Promptly

Strict requirements of the Social Security regulations make prompt and accurate filing of birth certificates by physicians more important than ever.

It will be noted in the following statutes from the Ohio General Code that certificates must be filed within the required time and that a penalty attaches for violation:

"Sec. 218. Each Birth in the State Shall Be Registered. Each birth that occurs in the state shall be immediately registered in the district in which it occurs, as hereinafter provided. Within ten days thereafter, the attending physician or midwife shall file with the Local Registrar of the district in which the birth occurred a certificate of birth, properly and completely filled out, giving all the particulars herein required.

"Sec. 12796. Violating Law Relating to Vital Statistics. Whoever violates a provision of law relating to the Bureau of Vital Statistics and the prompt and permanent registration of all births and deaths occurring in this state, or wilfully neglects or refuses to perform any duty imposed upon him by the provisions of such law . . . . shall be fined not less than Five Dollars ($5.00) nor more than One Hundred Dollars ($100.00)."

Appointed State Y.M.C.A. Chairman

Dr. Carl A. Wilzbach, Cincinnati, member of the Committee on Education and chairman of the Sub-Committee on Public Health Education of the Ohio State Medical Association, was recently appointed state chairman of the committee on physical work of the Ohio Area Council, Young Men's Christian Association. The Council is responsible for coordinating the activities of 120 Ohio Y.M.C.A. associations and branches.

Refresher Courses in Pediatrics and Obstetrics are Held in Four Parts of State

A refresher course in pediatrics was presented by the Bureau of Child Hygiene, State Department of Health, for physicians of Adams, Brown and Clermont counties, at Bethel, November 29. The speakers were Dr. Elmer G. Horton and Dr. Marion L. Ainsworth, Columbus. Dr. Ainsworth spoke at the morning session on "Care of Premature and Newborn Infants", and "Care and Problems During the Infant's First Year". In the afternoon, Dr. Horton lectured on "Communicable Diseases, Their Diagnosis, Prevention, Immunization and Treatment". Subjects discussed were measles, scarlet fever, meningitis, poliomyelitis, diphtheria and whooping cough. Dr. J. M. Coleman, Loveland, was chairman of the meeting.

A similar course was presented by the same speakers for 40 physicians of Clinton, Butler, Hamilton and Warren counties at Lebanon, November 30. Arrangements for the meeting were in charge of Dr. Mary Cook, Waynesville, and Dr. J. H. Arnold, Lebanon, president and secretary respectively of the Warren County Medical Society.

The Darke County Medical Society acted as host to approximately 50 physicians of Darke, Preble, Miami and Shelby counties, when a refresher course on obstetrics was presented at Greenville, December 1, by Dr. A. J. Skeel, Cleveland. Sessions were held at 10:00 A.M., 1:30 P.M., and 7:00 P.M. Subjects covered by Dr. Skeel were: "Puerperal Infections"; "Hemorrhages of Pregnancy, Labor and the Puerperium"; and "Dystocia". Plans for the course were made by the officers of the Darke County Medical Society,, Dr. J. P. Gibbel, Gettysburg, president, and Dr. W. D. Bishop, Greenville, secretary.

About 50 physicians from Clark, Champaign, Madison, Greene and Montgomery counties attended a refresher course on obstetrics given by Dr. Skeel at the City Hospital, Springfield, December 2. A general discussion of obstetrical rules and regulations for a first-class hospital was held at the morning session. In the afternoon, Dr. Skeel lectured on the "Treatment of Occipital Posterior"; "Prenatal and Puerperal Hemorrhage"; "Indications and Methods of Caesarian Section"; "Pregnancy In Case of Severe Diabetes"; "Education of Laymen in Prenatal Care"; "Toxemia of Pregnancy and Treatment"; "Tubal Pregnancy", and "Placenta Previa".

These courses, presented by the Bureau of Child Hygiene of the State Board of Health, are financed by Federal Social Security funds.

"HEALTH STANDARDS" TO SERVE AS A BASIS FOR DEPENDENT CHILDREN MEDICAL PROGRAMS IN COUNTIES ARE ISSUED

FOR the guidance of county boards of public assistance in formulating a local medical and health program for dependent children as a part of the Social Security Act, the Bureau of Aid to Dependent Children, State Division of Public Assistance, has issued a set of "Health Standards for Dependent Children".

The "standards" represent the cooperative efforts of the Committee on Public Relations and Economics of the Ohio State Medical Association, the State Department of Health and the Division of Public Assistance. The State Dental Society is working with the Division in preparing supplemental material governing dental care. Much time and effort were devoted by the Committee on Public Relations and Economics of the State Association in assisting the Division in the preparation of the "health standards" which should prove helpful to local administrators and local medical societies in discussions of policies and procedures. Changes may have to be made as experience accumulates.

SOME IMPORTANT PROVISIONS

The medical and health program for dependent children was outlined in the October issue of *The Ohio State Medical Journal*, pages 1145-1146. Officials of all county medical societies have been kept advised on developments through bulletins from the State Headquarters Office. Following are some of the high lights of the general agreements between the State Division and the State Medical Association and the "health standards" which have just been announced:

1. Programs are to be developed locally between the local A.D.C. administrator and board, the local medical and dental societies and the local health department.

2. The State Division will act in an advisory capacity and coordinating agency, issuing from time to time general information and recommendations to be followed locally when feasible.

3. By direction of the State Division, each county administrator will be expected to have a Local Professional Advisory Committee, consisting of representatives of the local medical society, the county health commissioner and a representative of the dental profession.

4. All qualified physicians (only doctors of medicine) may participate.

5. A great deal of discretion is left to the attending physician.

6. An effort will be made to keep record-keeping at a minimum.

7. Much responsibility is delegated to the Local Professional Advisory Committee.

8. The proposals are elastic enough to permit variations from county to county in line with local conditions and the desires of local physicians on questions of procedure, remuneration, scope of program, etc.

Work of setting up the program in the various counties is in progress. Some county medical societies already are cooperating in working out local details. In some counties plans have not been started but will get under way in the near future.

The "health standards" issued by Judge Henry J. Robison, chief of the Division, to all county administrators are as follows:

HEALTH STANDARDS FOR DEPENDENT CHILDREN

To safeguard the health of children receiving aid from the Aid to Dependent Children's fund and to bring such children under the supervision and care of competent physicians so that physical and mental disabilities and defects may be prevented and corrected when possible, the Division of Public Assistance of Ohio recommends that the following principles and procedures be used as a basis for medical and health programs which may be inaugurated in the various counties as a part of the Aid to Dependent Children Program and in conformity with the provisions of Amended House Bill No. 544, enacted by the Ninety-Second Ohio General Assembly:

I. PHYSICAL EXAMINATIONS

A. **Definitions:**

1. An inspection is an observation of signs or symptoms of any apparent illness, communicable disease, parasitic diseases, and skin conditions. Inspections should be conducted by a physician or registered nurse.
2. A medical examination is a systematic physical survey made by a physician.
3. A physician shall mean one duly licensed to practice medicine and surgery in Ohio.

B. **Systematic Physical Survey:**

1. Each child now receiving aid should receive a systematic physical examination immediately and a similar examination should be received by each child as added to the list of dependent children.
2. The child should be stripped for the examination which should be made by

a physician in the presence of a properly qualified third person.

3. The examination should include:

Nutrition	Genitalia
Development	Extremities
Posture	Reflexes
Skin and glands	Head
Vaccination scar	Neck
Chest	Ears
Heart	Teeth and Gums
Lungs	Throat
Abdomen	Tonsils

Historical evidence of immunization (diphtheria and typhoid).

(a) Routine vision test for children more than four years of age, with eye examination by ophthalmologist of children not passing vision test, recommended.

(b) If routine examination of eyes, ears, nose and throat reveals pathological conditions, a special examination by eye, ear, nose and throat specialist would be advisable.

C. Re-examinations:

Children to be re-examined once a year. Special examinations should be scheduled for children with marked symptoms or defects. The examination of infants should comply with standards followed by recognized pediatricians.

II. DENTAL CARE

Dental examinations should be made by a licensed dentist. There should be an admission dental examination and re-examination every six months. Standards will be prepared later by the State Dental Society.

III. MENTAL HYGIENE

When indicated, psychological and psychiatric examinations should be given by a psychiatrist.

IV. PREVENTIVE MEASURES

These may be administered by physicians in private practice or by official public health agencies equipped to provide such services, depending on agreements between the local A.D.C. administrator and the county medical society:

1. Vaccination against smallpox.
2. Immunization against diphtheria. Toxoid should be used. Schick testing of children under six years of age is not recommended unless immunization has been done. Schick testing of children over six years of age is desirable. Schick testing should be done six months after immunization with toxoid and repeated at least once every two years—preferably annually.
2. Typhoid immunization should be left to the discretion of the attending physician and proper local health authority.
4. Other immunizations and serum treatments should be left to the discretion of the attending physician.
5. Goiter: Use of preventive and therapeutic measures should be left to the discretion of the attending physician.

V. LABORATORY METHODS

Laboratory work may be done by physicians, private laboratories, local public health laboratories or the State Department of Health Laboratory, depending on local agreements.

VI. RECORDS AND FORMS

Complete and up-to-date records should be kept on examinations and subsequent corrective work. However, voluminous paper work by physicians should be avoided and an orderly, uncomplicated system of routing and filing records should be established. Nurses and social workers can assist in obtaining and handling forms and records.

VII. CORRECTION OF DEFECTS

1. All defects should be noted on examination forms and corrective measures started as soon as possible. Specialists should be consulted in unusual or complicated cases.
2. Arrangements should be made for hospitalization of emergency and serious disabilities best handled in a hospital, and for diagnostic procedure when indicated.

VIII. COMPENSATION AND ADMINISTRATION

1. There should be close cooperation between local A.D.C. officials, the Local Professional Advisory Committee and the county medical society on all phases of the medical and health program. Agreement should be worked out with the local society on the following points:

(a) The degree to which the above suggestions can be carried out locally.

(b) Are local facilities adequate or inadequate? A careful survey should be made before this question is decided.

(c) Should all medical and health services be provided by physicians engaged in private practice or should services falling within the classification of "Preventive Measures" be

rendered by county or city health departments?

(d) What system of authorization for services should be adopted?

(e) What plan of selecting specialists for special treatments and corrective work will meet with the approval of the county medical society?

(f) What method of compensating physicians for services rendered is satisfactory to the local medical society and what should be the amount of such compensation?

Golfers Special to A. M. A. Meeting

The American Medical Golfing Association's Twenty-Fourth Annual Golf Tournament will be held in San Francisco, California, on Monday, June 13, 1938, at the San Francisco Golf and Country Club.

A "Golfers Special" to the A.M.A. Meeting is being sponsored by the American Medical Golfing Association. Six games of golf have been arranged on the trip to the Coast, in New Orleans, Houston, Galveston, San Antonio, Los Angeles and Del Monte; and three on the return journey through Portland, Seattle, Vancouver, Lake Louise and Banff.

For full particulars write the president of the A.M.G.A., Dr. Walt P. Conaway, 1723 Pacific Avenue, Atlantic City, New Jersey; or Bill Burns, executive secretary, 2020 Olds Tower, Lansing, Michigan.

Study Eye Problems of Students

Dr. R. W. Bradshaw, Oberlin College, is chairman of the Eye Health Committee of the American Student Health Association, which is making plans for a study of the eye problems of college students, with the aid of an Advisory Committee from the American Academy of Ophthalmology and the cooperation of the National Society for the Prevention of Blindness. The committee includes Dr. Lee H. Ferguson, Western Reserve University, Cleveland. The inadequacy of present methods of discovering college students who need ophthalmic attention has impelled the American Student Health Association to seek the active help of ophthalmologists in dealing with this problem, according to Dr. Bradshaw.

Youngstown—Dr. William H. Bunn spoke on "The Heart and the Circulatory System" recently to the students of biology at Youngstown College.

Springfield—Dr. E. R. Hargett is doing postgraduate work at Vienna, Austria.

Obstetrics and Gynecology Board Exams

The next examination (written and review of case histories) by the American Board of Obstetrics and Gynecology, for Group B candidates who have filed applications will be held in various cities of the United States and Canada, on Saturday, February 5, 1938.

The general oral, clinical and pathological examinations for all candidates (Group A and B) will be conducted by the entire Board, meeting in San Francisco, California, on June 13 and 14, 1938, immediately prior to the meeting of the American Medical Association.

Applications for admission to the June, 1938, Group A examinations must be on an official application form and filed in the secretary's office before April 1, 1938.

For further information and application blanks address Dr. Paul Titus, secretary, 1015 Highland Building, Pittsburgh (6), Pa.

Guest Speakers in Other States

Ohio physicians who recently addressed medical societies in other states include: Dr. C. A. Ernstene, Cleveland, "Use of Drugs in Heart Disease", joint meeting of the Monongalia, Harrison and Marion County Medical Societies, Fairmont, W. Va., November 23; Dr. John H. Skavlem, Cincinnati, "Chronic Non-Tuberculous Lung Infections", Academy of Medicine, Parkersburg, W. Va., November 4; Dr. Benjamin S. Kline, Cleveland, "The Outstanding Features of the Kline Antigen", and Dr. Walter M. Simpson, Dayton, "High Temperatures", American Association for the Advancement of Science, Indianapolis, December 28, and Dr. Chas. A. Doan, Columbus, Seminar Lectures of the Seattle, Washington, General Hospital, beginning December 18.

Dr. T. Wingate Todd Honored

Surrounded by nearly 500 former and present students and associates, Dr. T. Wingate Todd, professor of anatomy of Western Reserve University School of Medicine, December 15, celebrated his 25th year as a member of the Western Reserve faculty at a surprise tea in his honor in the anatomy laboratory. Formerly a lecturer in anatomy and clinical anatomy at the University of Manchester, Manchester, England, Dr. Todd became professor of anatomy at Western Reserve in 1912. Dr. James E. Hallisy, senior clinical instructor in anatomy and surgery, presented Dr. Todd with several books and etchings on behalf of the staff.

Zanesville—Dr. J. H. J. Upham, Columbus, President of the American Medical Association, spoke on "The Trends of Modern Medicine", at a recent meeting of the Central Presbyterian Church Brotherhood.

QUESTIONS ASKED BY STATE MEDICAL BOARD IN EXAMINATIONS TAKEN BY 57 APPLICANTS FOR LICENSES IN OHIO, DEC. 1-3

LICENSES to practice medicine and surgery in Ohio were sought by 57 medical school graduates who took the semi-annual examinations given by the State Medical Board in Columbus, December 1-3.

There were also four applicants for osteopathic licenses and 65 applicants for limited practice certificates.

The limited practice applicants included 8 chiropractors, 13 mechano-therapists, 1 electro-therapist, 7 chiropodists, 32 masseurs and 4 cosmetic-therapists.

The results of the examinations will be certified at the next meeting of the Board, scheduled for January 4, at Columbus.

At its meeting on December 1, the Board revoked the certificate of Clarence E. Bowers, Circleville, to practice chiropractic and mechano-therapy, for violation of the rules and regulations governing limited practice; illegal use of drugs; gross immorality, and grossly unprofessional and dishonest conduct. The meeting was attended by all the members of the Board, namely, Dr. Lee Humphrey, Malta, president; Dr. Floyd S. Meck, Cleveland, vice-president; Dr. C. W. Waggoner, Toledo, treasurer; Dr. J. H. J. Upham, Columbus; Dr. L. T. Franklin, Chillicothe; Dr. Roy C. Hunter, Wapakoneta; Dr. Carl W. Dewey, Conneaut, and Dr. H. M. Platter, Columbus, secretary.

Questions asked those who took the medical and surgical examinations December 1-3, were as follows:

ANATOMY

1. Describe the structures forming the inguinal canal and describe their relation to hernia.
2. Give the origin and distribution of the following arteries: superior mesenteric; ovarian; femoral; peroneal and ophthalmic.
3. **FEMUR:** Name all the muscles that have attachments to it. State which are rotators; adducators; abducators; extensors. Briefly describe lower third.
4. Describe the Gasserian ganglion, giving location, relation, roots and branches.
   What regions of the head in general are supplied by each of its branches?
5. Give a concise description of the arches of the foot, naming the arrangement of the bones and ligaments, and discuss the important supporting structures.

PHYSIOLOGY

1. List the chief features of cerebellar lesions.
2. List and explain briefly the functions of the anterior lobe of the pituitary gland.
3. Discuss vital capacity and its clinical variations.
4. Discuss briefly the interconversion of foodstuffs.
5. Discuss renal insufficiency from the point of view of kidney function.
6. What factors affect the excitability of nerves?
7. Give the enzymes of the pancreatic juice and the foods they act on.
8. Define (a) adequate protein (b) ketogenic-antiketogenic ratio (c) basal metabolism.
9. What are the cardinal factors in accommodation?
10. Give the distinctive properties of heart muscle.

DIAGNOSIS

1. Give symptoms and signs of mitral stenosis.
2. Must there be a thrill over a stenosed heart valve?
3. Give signs and symptoms of severe sciatic neuritis in sixth week.
4. Give clinical signs and symptoms of typhoid fever.
5. Differentiate ruptured gastric ulcer and acute hemorrhagic pancreatitis.
6. Give blood findings in leukopenia and leukemia.
7. Differentiate glomerular nephritis.
8. Differentiate pericarditis with effusion and myocardial hypertrophy.
9. Describe findings in paresis.
10. Give signs and symptoms of tabes dorsalis.

CHEMISTRY

1. Give formula of formaldehyde; what are its uses?
2. What are esters? How are they formed?
3. Name five vitamins. Give physiological effect of each and state where found.
4. Distinguish between acidosis and hyperacidity.
5. Name three agencies that will bring about the hydrolysis of fats.

MATERIA MEDICA

1. Contrast the effect and uses of strychnine and caffeine.
2. List the remedies employed in cardiac decompensation and give dose of each.
3. Give the maximum dose for an adult of strychnia sulphate, atropine sulphate, pilocarpine, tr. digitalis, morphine sulphate, sulfanilamide.
4. Compare the effects on the uterus of ergot, pituitrin and quinine.
5. Give method of administration and uses of the following (a) sodium bicarbonate (b) sodium bromide (c) ammonium chloride (d) calcium gluconate.
6. Give the physiological action of tr. of veratrum and tr. of aconite, with dose of each and indication.
7. What expectorant would you use to relieve (a) spasmodic cough (b) dry hacking cough (c) chronic cough with profuse expectoration.
8. What is an alkaloid, a tincture, a fluid extract; give comparative dose.
9. Give uses and proper dose of aromatic spirits of ammonia.
10. Name the four most important carminatives; give physiological action and uses.

MATERIA MEDICA
(Homeopathic)

1. Explain briefly what is meant by proving: aggravation, modalities.
2. What remedy acts as a general antidote after long continued use of various drugs?
3. Name any four remedies commonly used in chronic skin diseases; give skin indications for any one of these.
4. In what general condition is Stannum met? Indicated? About how long has this remedy been in use in the homeopathic school?
5. Give modalities of Arsenicum Alb., Sulphur, Lachesis, Rhus Tox.
6. What type of patient is the calcarea carb. individual? Differentiate the calcarea carb and calc phos patient.
7. Give brief indications for Aconite—medalities and antidote.
8. Name five remedies frequently indicated in pneumonia and give particular indications for one.
9. Differentiate briefly these remedies in diarrhea—Ipecac, Croton Tig., Aloes, Merc cor.
10. Name two remedies for influenza and their indications.

PRACTICE

1. At what season of the year is acute anterior poliomyelitis most prevalent, and give the symptoms of the preparalytic state.
2. Give the prognostic significance in finding in the blood (a) a high non-protein nitrogen (b) high creatinin readings, and in the urine, the presence of diacetic acid.
3. Give the symptoms of an impacked gall-stone in the

common duct as compared with carcinoma of the head of the pancreas compressing the bile duct.

4. Give the physical signs of pleural effusion; upon what grounds would you make a tentative diagnosis of a purulent effusion and how confirm such diagnosis, giving technic of procedure.

5. Describe the effect of over activity of the thyroid on the cardiovascular system, and discuss remedial measures.

6. Discuss two reactions sometimes following the use of immunizing serums (a) immediate (b) delayed.
Give the symptoms and means of combating them.

7. Give the symptoms of a hypertensive heart with beginning decompensation. Give treatment.

8. Discuss briefly two sequlae of epidemic encephalitis and give prognosis.

9. Define aphasia, amnesia, neurosis, psychosis, paresthesia.

10. Give two examples of abnormal functions of ductless glands; discuss the clinical manifestations and treatment.

BACTERIOLOGY, PATHOLOGY AND HYGIENE

1. Upon what factors does successful blood transfusion depend, and how proceed before carrying out such measure?

2. How would you make a presumptive bacteriologic diagnosis of diphtheria and how further confirm it?

3. Describe the organism of tularemia, where is it usually found and what advice would you give as prophylaxis in the hunting season?

4. Describe the predisposing conditions and after effects in the heart in coronary thrombosis.

5. Discuss the pathology in the stomach, kidney and liver following the taking of a poisonous dose of arsenic.

6. What is the pathologic sequence in generalized arterio sclerosis of the cerebral arteries?

7. Describe the difference in the pathologic picture in the spinal cord in (a) locomotor ataxia (b) in anterior poliomyelitis.

8. Discuss the technic of inducing immunity against (a) small-pox (b) diphtheria (c) tetanus with type of immunity produced, and probable duration in each.

9. Under only what conditions should a physician undertake a therapeutic abortion?

10. Discuss briefly the possibilities of milk as a factor in transmitting disease.

SURGERY

1. Give the site for elective amputation in (a) lower leg (b) forearm. What are the requirements of a good amputation stump?

2. Describe paronychia; give its treatment.

3. Discuss the management of an elderly patient who exhibits a dry gangrene of one or more toes.

4. Describe completely your treatment of a compound spiral fracture of both bones of the leg.

5. Discuss ruptured ectopic pregnancy (right side) as to diagnosis, differential diagnosis, treatment.

6. Discuss intestinal obstruction as to causes, symptoms and treatment.

7. Discuss the treatment of (a) furunculosis (b) carbuncle (c) cellulitis.

8. Differentiate acute appendicitis, unilateral acute salpingitis and ureteral colic.

9. What procedure is necessary in a medico-legal sense before performance of a surgical operation on an adult or a minor?

10. Discuss the management of a patient found unconscious from a head injury.

OBSTETRICS

1. Describe the pelvic straits.

2. What would lead you to suspect some retained portion of the placenta? Give causes and treatment.

3. On what grounds is it proper to produce an abortion? What precaution should you take? Give procedure.

4. Indication for the use of forceps, what precaution should you take and give mode of application.

5. When would you be justified in rupturing the membrane? give procedure.

SPECIALTIES

1. Outline management and treatment of secondary syphilis.

2. Give diagnosis, treatment and prognosis of laryngeal tuberculosis.

3. Give differential diagnosis and treatment of chalazion and sty.

4. Give differential diagnosis of scabies and ivy poisoning.

5. Give diagnosis and treatment of trench mouth.

Attorney General Ruling

The following is the syllabus of Opinion No. 1121, issued by Attorney General Herbert S. Duffy, September 10, in answer to a request from Dr. Walter H. Hartung, State Director of Health:

"(1) A regulation proposed by the board of health of a city for enactment cannot be validly passed without the signature of the mayor as president of the board of health; however, the mere physical act of signing is simply ministerial and not an exercise of discretion and mandamus will lie to compel its performance. (2) In the absence of the mayor as the presiding officer, the board of health of a city can validly enact regulations signed by the president pro tem. as the presiding officer. (3) Despite the fact that a regulation adopted by a board of health intended for the general public is a legislative act amounting in substance to an ordinance, the veto power of the mayor, as provided for in Sec., 4234, does not extend to such regulations but is confined to the legislative acts of the council of a municipal corporation."

A. P. H. A. Resolution

At the recent annual meeting of the American Public Health Association, a resolution was adopted calling for the appointment of a special committee to study the public health aspects of medical care and to cooperate with the United States Public Health Service and other Federal agencies represented in the President's Interdepartmental Committee on Health and Welfare, and the American Medical Association, the American Dental Association and other appropriate bodies in extending public health work to meet modern needs, especially those occasioned by the increasing importance of chronic diseases as causes of sickness and death.

Council on Industrial Health Named

In accordance with a recommendation of the Board of Trustees of the American Medical Association, approved by the House of Delegates at the Atlantic City session last June, the Board has established a Council on Industrial Health, composed of the following: Dr. Stanley J. Seeger, Milwaukee, chairman; Dr. Harvey Bartle, Philadelphia; Dr. Warren F. Draper, Washington, D. C.; Dr. Leroy U. Gardner, Saranac Lake, N. Y.; Dr. Morton R. Gibbons, San Francisco; Dr. H. H. Kessler, Newark, N. J.; Dr. A. D. Lazenby, Baltimore; Dr. Earl D. Osborn, Buffalo, and Dr. C. W. Roberts, Atlanta, Ga. The function of the council will be to deal with matters pertaining to occupational diseases and other phases of industrial health.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: PARKE G. SMITH, M.D., CINCINNATI)

BUTLER

Officers of the Butler County Medical Society for 1938 are: Dr. D. M. Blizzard, Middletown, president; Dr. W. E. Griffith, Hamilton, vice-president; Dr. Mildred White Gardiner, Middletown, secretary-treasurer; Dr. Harry M. E. Lowell, Hamilton, legislative committeeman; Dr. Harold O. Lund, Middletown, delegate; and Dr. F. W. Brosius, Middletown, alternate.—Mildred White Gardiner, M.D., secretary.

CLERMONT

Officers of the Clermont County Medical Society for 1938 are: Dr. Jas. K. Ashburn, Batavia, president; Dr. J. T. Crone, Milford, vice-president; Dr. J. M. Coleman, Loveland, secretary-treasurer; Dr. Thomas Longworth, Felicity, legislative committeeman; Dr. O. C. Davison, Bethel, censor for three years; Dr. F. H. Lever, Loveland, medical defense committeeman; Dr. Ashburn, delegate; and Dr. Coleman, alternate.

Dr. J. L. Fomorin, Marathon, oldest member of the society, paid his annual dues for the fiftieth time while attending a "refresher course" meeting in Bethel, November 29. The society made Dr. Fomorin a life member in recognition of this record, and his faithful attendance and constant interest in the society and organized medicine.—J. M. Coleman, M.D., secretary.

CLINTON

Dr. Arthur W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, presented many valuable facts in an interesting address on "Diagnosis and Treatment of Diseases of Children", at a meeting of the Clinton County Medical Society, at the General Denver Hotel, Wilmington, Tuesday noon, December 7.—Elizabeth Shrieves, M.D., Correspondent for *The Journal.*

The society re-elected the following officers for 1938: Dr. T. E. Craig, Sabina, president; Dr. L. H. Fullerton, New Vienna, vice-president; Dr. V. E. Hutchens, Wilmington, secretary-treasurer; Dr. F. A. Peelle, Wilmington, legislative committeeman; Dr. Robert Conard, Wilmington, delegate; and Dr. Glenn K. Dennis, Wilmington, alternate.—V. E. Hutchens, M.D., secretary.

FAYETTE

Dr. P. L. Harris, of the State Department of Health, gave a very interesting talk on the "Syphilis Program" at a meeting of the Fayette County Medical Society, Wednesday afternoon, December 16, at Washington C. H.—James F. Wilson, M.D., secretary.

HAMILTON

The following programs were presented by The Academy of Medicine of Cincinnati during December:

December 7—"Regional Ileitis: Regional Colitis", by Dr. Burrill B. Crohn, New York City.

December 14—"Extra-Glandular Influences Upon Ovulation, Menstruation and Labor", by Dr. Irving F. Stein. This meeting was held under the auspices of the Cincinnati Obstetrical Society.

December 21—"Legal Hazards in the Practice of Medicine", by Hon. Nelson Schwab, Judge of the Common Pleas Court of Hamilton County; "Health Hazards in the Practice of Medicine", by Dr. Karl G. Zwick.—Bulletin.

New officers of the academy are: Dr. Charles D. Heisel, president; Dr. Richard S. Austin, president-elect; Dr. Joseph N. Ganim, secretary; Dr. Oscar Berghausen, treasurer; Dr. Emil R. Swepston, chairman, legislative committee; Dr. Edward D. King, chairman, medical economics committee; Dr. Carl A. Wilzbach, chairman public relations committee; Dr. Henry B. Freiberg, Dr. V. Bradley Roberts, Dr. Emil R. Swepston, Dr. Max M. Zinninger, Dr. Ralph G. Carothers, Dr. Otto J. Seibert, Dr. E. O. Swartz, delegates; Dr. Wm. J. Topmoeller, Dr. Charles D. Heisel, Dr. George Renner, Jr., Dr. Joseph C. Lindner, Dr. John W. McCammon, Dr. Daniel C. Rivers, Dr. Irving H. Schroth, alternates.—R. A. Swink, executive secretary.

HIGHLAND

Dr. Robert C. Austin, Dayton, spoke on "Some New Ideas in the Surgical Treatment of Hernia by the Use of Fascia Sutures", at a meeting of the Highland County Medical Society, Wednesday, December 1, at the Parker House, Hillsboro.—News clipping.

WARREN

Officers of the Warren County Medical Society for 1938 are: Dr. Edw. C. Morey, Franklin, president; Dr. C. J. Haarlammert, Loveland, vice-president; Dr. James H. Arnold, Lebanon, secretary; Dr. A. D. Harvey, Lebanon, treasurer; Dr. Wm. Edward Blair, Lebanon, legislative committeeman and public relations committeeman; Dr. Mary L. Cook, Waynesville, member of board of censors; Dr. P. W. Tetrick, Mason, medical de-

fense committeeman; and Dr. N. A. Hamilton, Franklin, delegate.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CHAMPAIGN

Officers of the Champaign County Medical Society for 1938 are: Dr. E. D. Buhrer, Urbana, president; Dr. D. C. Houser, Urbana, president-elect, legislative committeeman and delegate; Dr. F. R. Grogan, Urbana, secretary-treasurer; and Dr. J. W. Norman, alternate.—F. R. Grogan, M.D., secretary.

CLARK

The Clark County Medical Society elected the following officers for the ensuing year at a meeting at Springfield, December 9: Dr. C. E. M. Finney,president; Dr. H. B. Elliott, vice-president; Dr. J. O. Neese, secretary; Dr. F. P. Anzinger, treasurer; and Dr. G. M. Lane, delegate, all of Springfield.—G. M. Lane, M.D., retiring secretary.

GREENE

Officers of the Greene County Medical Society for 1938 are: Dr. R. R. McClellan, Xenia, president; Dr. David Taylor, Yellow Springs, vice-president; Dr. Donald F. Kyle, Cedarville, secretary-treasurer; Dr. P. D. Espey, Xenia, legislative committeeman; Dr. H. C. Messenger, Xenia, delegate; and Dr. C. G. McPherson, Xenia, alternate. —S. C. Ellis, M.D., secretary.

DARKE

At a meeting of the Darke County Medical Society, Friday evening, December 17, at the Christian Church, Greenville, Dr. C. A. Coleman, Dayton, discussed a few of the more common urological cases of interest to the general practitioner.—W. D. Bishop, M.D., secretary.

MIAMI

Through the courtesy of the Mead Johnson Company, two motion pictures, "Intercranial Injuries of the New Born", and "Resuscitation of the New Born", were shown at a meeting of the Miami County Medical Society, at Stouder Hospital, Troy, Friday afternoon, December 3.

The society elected the following officers for the ensuing year: Dr. J. F. Hill, West Milton, president; Dr. G. E. McCullough, Troy, vice-president; Dr. G. A. Woodhouse, Pleasant Hill, secretary-treasurer; Dr. I. C. Kiser, Piqua, legislative committeeman and delegate; Dr. H. W. Kendell, Covington, alternate.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

A symposium on "Pneumonia" was presented by Drs. W. B. Taggart, Melvin Oosting, R. J. Price, Benedict Olch, and A. F. Kuhl, at a meeting of the Montgomery County Medical Society, Friday evening, December 3, in the Fidelity Building Auditorium, Dayton.

The new officers of the society are: Dr. E. L. Braunlin, president; Dr. W. E. Prugh, first vice-president; Dr. B. F. Suffron, second vice-president; Dr. H. V. Dutrow, legislative committeeman; Dr. R. K. Finley, Dr. C. D. Smith, and Dr. R. S. Binkley, members of public relations and medical economics committee; Dr. Dutrow, Dr. A. W. Carley, Dr. P. L. Yordy, and Dr. E. M. Huston, delegates; Dr. E. M. Smith, Dr. M. R. Haley, Dr. C. J. Derby, and Dr. G. C. Grout, alternates.—Mildred E. Jeffrey, executive secretary.

PREBLE

Dr. J. Grant Marthens, Dayton, spoke on "The Diagnosis and Treatment of Syphilis", at a meeting of the Preble County Medical Society, Wednesday noon, November 24, at the Courthouse, Eaton.—News clipping.

SHELBY

Officers of the Shelby County Medical Society for 1938 are: Dr. R. W. Alvis, president; Dr. B. A. Welch, vice-president; Dr. E. P. Sparks, Jr., secretary-treasurer; Dr. V. W. LeMaster, legislative committeeman; Dr. A. W. Hobby, public relations committeeman; Dr. C. C. Hussey, medical economics committeeman; Dr. L. C. Pepper, delegate; and Dr. J. W. Tirey, Anna, alternate. With the exception of Dr. Tirey, the above officers are all from Sidney.—R. W. Alvis, M.D., retiring secretary.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

ALLEN

Alfred Gus Karger, WLW radio commentator, spoke on "National Defense and the Situation in the Far East", at a meeting of the Academy of Medicine of Lima and Allen County, Tuesday evening, December 14, at Memorial Hospital, Lima. —News clipping.

AUGLAIZE

Auglaize County Medical Society held its regular meeting at St. Marys, Thursday evening, December 9. Those present listened to a very practical and convincing paper by Dr. Walter R. Griess, Cincinnati, on "Treatment of Gastric Ulcer, with Special Reference to the Use of Emetine Hydrochloride".

This was followed by an extended discussion of the requirements of the new program of the State Bureau of Aid to Dependent Children.

The annual election resulted in the re-election of the following officers for 1938: Dr. E. F. Heffner, Wapakoneta, president; Dr. H. J. Gudenkauf, Minster, vice-president; Dr. Charles C. Berlin, Wapakoneta, secretary-treasurer; Dr.

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Guy E. Noble, St. Marys, chairman, and Dr. R. C. Hunter, Wapakoneta, and Dr. Carl W. Ekermeyer, New Bremen, members, of the legislative committee; Dr. T. A. Campbell, Wapakoneta, chairman, and Dr. Gudenkauf, Dr. Noble, Dr. Berlin, and Dr. Geo. B. Faulder, Wapakoneta, members, public relations committee; Dr. Noble, delegate; and Dr. Hunter, alternate.—Chas. C. Berlin, M.D., secretary.

HANCOCK

Officers of the Hancock County Medical Society for 1938 are: Dr. B. F. Mowry, Findlay, president; Dr. Ralph E. Rasor, Bloomdale, vice-president; Dr. L. H. Goodman, Findlay, secretary; Dr. E. J. Thomas, Findlay, treasurer; Dr. E. E. Rakestraw, Findlay, legislative committeeman; Dr. D. D. Biggs, Findlay, public relations committeeman; Dr. D. J. King, Dr. T. A. Spitler and Dr. P. C. Pennington, Findlay, medical economics committeemen; Dr. J. V. Hartman, Findlay, delegate.—B. F. Mowry, M.D., retiring secretary.

HARDIN

Hardin County Medical Society elected the following officers for the ensuing year at its meeting at Kenton, December 16: Dr. N. C. Schroeder, Kenton, president; Dr. G. F. Moench, Mt. Victory, vice-president; Dr. John A. Mooney, Kenton, secretary-treasurer; Dr. F. M. Elliott, Ada, legislative committeeman; Dr. R. G. Schutte, Kenton, delegate; and Dr. Mooney, alternate.—John A. Mooney, M.D., secretary.

LOGAN

A well-attended meeting of the Logan County Medical Society was held at the Hotel Logan, Bellefontaine, Friday evening, November 5. Following various committee reports, the following resolution, presented by Dr. C. K. Startzman, was approved and ordered sent to the Ohio State Medical Association: "Resolved: That a central censorship of some sort should be imposed on publication of articles on medical topics in lay magazines and newspapers, except in case of emergencies, and that this censorship be extended to include radio addresses on medical subjects".

The following officers were elected for 1938: Dr. F. Blair Webster, Bellefontaine, president; Dr. C. L. Thompson, York, vice-president; and Dr. C. L. Barrett, Bellefontaine, secretary-treasurer.—F. Blair Webster, M.D., secretary.

MERCER

Officers of the Mercer County Medical Society for 1938 are: Dr. W. C. Scheidt, Celina, president; Dr. E. J. Willke, Maria Stein, vice-president; Dr. Frank E. Ayers, Celina, secretary-treasurer; Dr. M. L. Downing, Rockford, legislative committeeman; Dr. J. T. Gibbons, Celina, medical economics committeeman; Dr. Downing, delegate; and Dr. G. I. Scheetz, Rockford, alternate. —Frank E. Ayers, M.D., secretary.

SENECA

A fine program was presented at a meeting of the Seneca County Medical Society, Thursday evening, December 9, at the Shawhan Hotel, Tiffin. Dr. A. A. Applebaum, Toledo, spoke on "Abdominal Pain as Seen by the Internist, with Special Reference to Coronary Disease"; and Dr. F. M. Douglass, Toledo, discussed, "Abdominal Pain With Special Reference to Appendicitis".—Edmund F. Ley, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

FULTON

Officers of the Fulton County Medical Society for 1938 are: Dr. C. F. Hartmann, Wauseon, president; Dr. A. M. Wilkins, Delta, vice-president; Dr. Geo. McGuffin, Pettisville, secretary-treasurer; Dr. C. L. Hutchins, Delta, legislative committeeman; Dr. R. E. Merrill, Delta, corresponding secretary; Dr. R. W. Reynolds, Fayette, delegate; and Dr. Thomas F. Smith, Lyons, alternate.—Geo. McGuffin, M.D., secretary.

HENRY

Policy of the Ohio State Medical Association concerning the practice of medicine by nurses in some mercantile establishments and hospitals connected with industrial plants, as outlined in Secretaries' Bulletin No. 17, dated December 10, was approved by the Henry County Medical Society at its meeting at Napoleon, December 14.

The society elected the following officers for 1938: Dr. C. B. Geiger, Holgate, president; Dr. B. L. Johnson, Deshler, vice-president; Dr. J. R. Bolles, Napoleon, secretary-treasurer; Dr. H. F. Rohrs, Napoleon, legislative committeeman; Dr. J. H. Fiser, Malinta, Dr. Bolles and Dr. C. G. Hissong, Hamler, members of the public relations and medical economics committee; Dr. J. J. Harrison, Napoleon, delegate; and Dr. T. P. Delventhal, Napoleon, alternate.—J. R. Bolles, M.D., secretary.

LUCAS

The following programs were presented by The Toledo Academy of Medicine during December:

December 3—General Meeting. "The Diagnosis and Treatment of Nerve Root Pain as Associated with Backache and Visceral Pain", with motion picture demonstration, by Dr. Wm. Bates, professor of surgery, University of Pennsylvania Graduate School of Medicine.

December 10—Section of Pathology, Experimental Medicine and Bacteriology. "The Management of Obesity", by Dr. E. Perry McCullagh, Cleveland.

December 17—Medical Section. "The Treatment of Pneumonia", by Dr. M. A. Blankenhorn, director, Department of Internal Medicine, Uni-

versity of Cincinnati, College of Medicine.—Bulletin.

OTTAWA

The following officers have been elected by the Ottawa County Medical Society for 1938: Dr. A. S. Mack, Oak Harbor, president; Dr. W. R. Gibson, Oak Harbor, vice-president; Dr. C. R. Wood, secretary-treasurer; Dr. Mack, delegate; and Dr. Wood, alternate.—C. R. Wood, M.D., secretary.

PUTNAM

Dr. R. O. Ruch, Lima, was the speaker at a meeting of the Putnam County Medical Society, Tuesday evening, November 9, at the Hotel Dumont, Ottawa.—News clipping.

SANDUSKY

A meeting of the Sandusky County Medical Society was held at the Old Elm Tea room, Fremont, Tuesday evening, November 23. The speaker was Dr. Karl Kitchen, of the Parke-Davis Company, Detroit, Mich.—News clipping.

The society recently sent a letter to Representative Dudley E. White, member of Congress, stating that it was strongly opposed to use of tax monies in the opening and operation of the federally subsidized "Group Health Association, Inc., for H.O.L.C. employees, or any other proposed form of government subsidized medical practice.—M. M. Riddell, M.D., secretary.

WOOD

At a business meeting of the Wood County Medical Society, Thursday evening, December 9, at the Woman's Club, Bowling Green, the following officers were elected for 1938: Dr. F. V. Boyle, Bowling Green, president; Dr. E. A. Powell, North Baltimore, vice-president; Dr. R. N. Whitehead, Bowling Green, secretary-treasurer; Dr. D. R. Barr, Grand Rapids, legislative committeeman; Dr. Powell, medical economics committeeman; Dr. Earl D. Foltz, North Baltimore, delegate; and Dr. Paul F. Orr, Perrysburg, alternate.—R. N. Whitehead, M.D., secretary.

Fifth District

(COUNCILOR: HARRY V. PARYZEK, M.D., CLEVELAND)

CUYAHOGA

The following programs were presented by The Academy of Medicine of Cleveland during December:

December 3—Clinical and Pathological Section —Case Reports. "Aleukemic Leukemia", by Dr. S. S. Berger; "Lipoid Pneumonia", by Dr. H. S. Applebaum and Dr. P. Wasserman; "Scleroderma", by Dr. B. Levine; "Coeliac Disease with Acrodynia", by Dr. J. W. Epstein; "Carcinoma of Colon Simulating Appendical Abscess", by Dr. A. Strauss; "Erb's Palsy Treated Conservatively", by Dr. R. Reich; "Congenital Atresia of Bowel in Infant Brothers", by Dr. M. Garber.

December 8—Industrial and Orthopedic Section. —"Bone Malignancy and/or Trauma — Two Cases", by Dr. W. G. Stern; "Sulphanilamide Treatment of Infectn in Medicine", by Dr. W. G. Stern; "Urology", by Dr. R. K. Updegraff, Jr., "Surgery", by Dr. F. T. Gallagher; "Plastic Operations of the Hip", by Dr. G. I. Bauman; "Fractures—Some Problems in Diagnosis and Treatment", by Dr. R. P. Bell and Dr. G. I. Bauman.

December 10—Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "The Pathology of 100 Cases of Bronchiogenic Carcinoma", by Dr. S. Koletzky; "Intrabronchial Treatment of Lobar Pneumonia", by Dr. Anna M. Young and Dr. B. S. Kline; "Oxidation-Reduction Phenomena and Complementary Activity", by E. E. Ecker, Ph.D.; "Experimental Hypertension. The Effect of Constricting the Aorta", by Dr. H. Goldblatt and Dr. J. R. Kahn.

December 14—Military Section. "Principles of Map Reading, Aerial Reconnaissance and Photography", by Dr. Henry Crawford.

December 15—Obstetrical and Gynecological Section. "Caesarean Section", by Dr. A. J. Skeel; "Pelvic Mensuration by X-ray", by Dr. Theodore Miller and Dr. R. J. May.

December 17—General Meeting. "The Drug Treatment of Heart Disease", by Dr. Robert Louis Levy, Columbia University, New York.—Bulletin.

ERIE

Dr. A. P. R. James, Toledo, spoke on "The Cardio-Vascular Aspects of Lues", at a meeting of the Erie County Medical Society, at the Hotel Rieger, Sandusky, Thursday evening, November 18.

"Relationship Between Workmen's Compensation and State Medicine", was the subject discussed by Dr. Sidney McCurdy, supervisor, Medical Secton, State Industrial Commission, at a meeting of the society on December 16.

GEAUGA

The Geauga County Medical Society held its 1937 meetings on the last Wednesday of each month, April to November. Deep snow and professional duties make it quite impossible to get ten members together during Geauga County's five months of Winter.

The meeting on April 28 was devoted to business matters, after which Dr. W. C. Cory, Chardon, county health commissioner, gave a vivid account of his experiences while on duty in Kentucky during the Ohio River flood in January.

The problem of medical relief was discussed at a meeting on May 26, and Dr. H. E. Shafer, Middlefield, delegate, gave a report on the Dayton meeting of the State Association.

Dr. Wm. H. Bunn, Youngstown, gave a very

instructive illustrated talk on "Cardiac Irregularities", at a meeting of the society on June 30.

The speaker at the meeting on July 28 was Dr. Thomas A. Shupe, Cleveland, who gave much valuable information concerning "Bacterial Infections of the Kidneys and their Treatment".

Dr. I. H. Einsel, Cleveland, gave a most interesting talk on " Diseases of the Upper Intestinal Tract", at the meeting on September 29, and Dr. I. M. Hinnant spoke ably on "Allergy and Allergic Diseases", at the same meeting.

At a business meeting on October 27, dues were collected for 1938, and the following officers elected: Dr. Lucy S. Hertzog, Chardon, president; Dr. F. S. Basquin, Chardon, vice-president; Dr. Isa Teed Cramton, Burton, secretary-treasurer; Dr. W. C. Cory, Chardon, legislative committeeman; Dr. Hertzog, public relations and medical economics committeeman.—Isa Teed Cramton, M.D., secretary.

LAKE

Officers of the Lake County Medical Society for 1938 are: Dr. Warren Payne, Willoughby, president; Dr. H. S. Wells, Willoughby, vice-president; Dr. M. H. Carmody, Painesville, secretary-treasurer; Dr. Benjamin S. Park, Painesville, legislative committeeman; Dr. C. B. Elliott, Painesville, public relations committeeman; Dr. Geo. F. Barnett, Painesville, medical economics committeeman; Dr. V. N. Marsh, Painesville, delegate; and Dr. F. J. Dineen, Painesville, alternate.—Warren Payne, M.D., secretary.

LORAIN

In accordance with the by-laws of the Lorain County Medical Society, which state that "at least one meeting each year shall be devoted to a discussion of the business affairs of the profession in our county with a view to adopting the best methods for the guidance of all", a meeting for that purpose was held at the Hotel Greystone, Elyria, Tuesday, December 14. Discussions were opened by Dr. G. D. Nicholas, Elyria; Dr. A. C. Siddall, Oberlin; Dr. I. L. Levin, Lorain; and Dr. Taylor Smith, Avon.

Officers of the society for 1938 are: Dr. A. S. McKitrick, Elyria, president; Dr. A. H. Smith, Amherst, vice-president; Dr. L. H. Trufant, Oberlin, secretary-treasurer; Dr. S. V. Burley, Lorain, legislative committeeman; Dr. Charles A. Meek, Lorain, public relations committeeman; Dr. Burley and Dr. Meek, delegates; Dr. John T. Fawcett, Elyria, and Dr. E. J. Heinig, Vermilion, alternates.—L. H. Trufant, M.D., secretary.

MEDINA

Wives of physicians were guests at a dinner meeting of the Medina County Medical Society, Thursday, November 18, at the Wadsworth Hospital. Prior to the dinner, Dr. A. S. Robinson, Akron, talked on "The Treatment of Visceroptosis".—News clipping.

Sixth District

(COUNCILOR: WM. M. SKPP, M.D., YOUNGSTOWN)

ASHLAND

A dinner meeting of the Ashland County Medical Society, with wives of the members as guests, was held at the Lutheran Church, Perrysville, Friday evening, December 10. Following the entertainment arranged by Dr. Elmer L. Jackson, Perrysville, an interesting address on "The Psychiatric Aspect of Genius" was made by Dr. Louis J. Karnosh, Cleveland. The meeting was attended by Dr. Wm. M. Skipp, Youngstown, Sixth District Councilor. His interest in our society is very much appreciated.—M. D. Shilling, M.D., secretary.

HOLMES

Dr. F. C. Potter, Akron, spoke on "How to Type Pneumococcus Organisms", at a meeting of the Holmes County Medical Society, Thursday night, November 11, at Pomerene Memorial Hospital, Millersburg.

The society elected the following officers for 1938: Dr. Neven P. Stauffer, Killbuck, president; Dr. A. J. Earney, Millersburg, secretary-treasurer; Dr. Stauffer, delegate; and Dr. J. C. Elder, Millersburg, alternate.—A. J. Earney, M.D., secretary.

PORTAGE

Dr. Lester L. Bottsford, Akron, discussed "Obstetrics", at a meeting of the Portage County Medical Society at the home of the secretary in Kent, Thursday evening, December 2. Dr. William M. Skipp, Youngstown, Councilor for the Sixth District, spoke on several subjects of current interest to the profession, including medical care of indigents, "Committee of Physicians", and the attitude of the Ohio State Medical Association and the American Medical Association toward federalized medicine.

Officers of the society for 1938 are: Dr. J. S. Deyell, Ravenna, president; Dr. J. M. Painter, Kent, vice-president; Dr. E. J. Widdecombe, Kent, secretary-treasurer; Dr. George J. Waggoner, Ravenna, legislative committeeman; Dr. W. B. Andrews, Kent, medical economics committeeman; Dr. Deyell, delegate; and Dr. Painter, alternate.—E. J. Widdecombe, M.D., secretary.

STARK

"Modern Treatment of Lobar Pneumonia" was the subject presented by Dr. Wm. S. Middletown, dean of the University of Wisconsin Medical School, at a meeting of the Stark County Medical Society, at St. Paul's Episcopal Church, Canton, Thursday evening, December 16.—Clair B. King, M.D., secretary.

SUMMIT

President H. E. Simmons of the University of Akron was the speaker at the annual dinner and ladies' night of the Summit County Medical So-

ciety, Tuesday evening, December 7, at the Mayflower Hotel, Akron.—Bulletin.

WAYNE

Dr. Fred B. Wishard, Anderson, Indiana, surgeon for the Delco-Remy Corporation, spoke on "Infections of the Hand", at a meeting of the Wayne County Medical Society, at Wooster, Friday evening, November 26. Dr. Wishard is a son of Dr. John G. Wishard, Wooster.—News clipping.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

BELMONT

Officers of the Belmont County Medical Society for 1938 are: Dr. R. H. McCommon, Shadyside, president; Dr. L. L. Liggett, St. Clairsville, president-elect; Dr. C. W. Kirkland, Bellaire, secretary-treasurer; Dr. R. H. Wilson, Martins Ferry, legislative committeeman; Dr. McCommon, public relations committeeman; Dr. C. B. Messerly, Martins Ferry, medical economics committeeman; Dr. McCommon, delegate; and Dr. Liggett, alternate. —C. W. Kirkland, M.D., secretary.

COLUMBIANA

Columbiana County Medical Society held its regular monthly meeting on Tuesday evening, December 14, at Lisbon. The guest speaker was Charles S. Nelson, Columbus, Executive Secretary of the Ohio State Medical Association, who gave a very interesting talk on the activities of the State Association.

The society elected the following officers for the ensuing year: Dr. L. W. King, Salem, president; Dr. C. W. DeWalt, Columbiana, vice-president; Dr. L. C. Ziegler, Salem, secretary-treasurer; Dr. J. W. Schoolnic, East Liverpool, and Dr. R. E. Smucker, Salem, legislative committeemen; Dr. John A. Murphy, East Liverpool, medical economics committeeman; Dr. John A. Fraser, East Liverpool, delegate; and Dr. Paul H. Beaver, Leetonia, alternate.—J. W. Schoolnic, M.D., retiring secretary.

HARRISON

Officers of the Harrison County Medical Society for 1938 are: Dr. Joseph McElhattan, Freeport, president; Dr. R. P. Rusk, Cadiz, vice-president; Dr. James A. L. Toland. Jewett, seecretary-treasurer; Dr. H. E. Koepke, Cadiz, legislative committeeman; Dr. Rusk, public relations committeeman; Dr. Anna B. Watson, New Athens, medical economics committeeman; Dr. E. L. Miller, Bowerston, delegate; and Dr. Toland, alternate. —James A. L. Toland, M.D., secretary.

TUSCARAWAS

The Tuscarawas County Medical Society has elected the following officers for 1938: Dr. Daniel W. Shumaker, Dover, president; Dr. Glenn I. Goodrich, Dover, vice-president; Dr. David H. Allen, Dover, secretary-treasurer; Dr. James A. McCollam, Uhrichsville, legislative committeeman; Dr. M. W. Everhard, New Philadelphia, delegate; and Dr. J. W. Calhoon, Uhrichsville, alternate.—W. E. Hudson, M.D., retiring secretary.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

GUERNSEY

Officers of the Guernsey County Medical Society for 1938 are: Dr. H. W. Arndt, Lore City, president; Dr. B. A. Souders, Cambridge, vice-president; Dr. W. L. Denny, Cambridge, secretary-treasurer; Dr. M. S. Lawrence, Quaker City, legislative committeeman; Dr. George Swan, Cambridge, delegate; and Dr. F. Gordon Lawyer, Cambridge, alternate.—W. L. Denny, M.D., secretary.

LICKING

The Licking County Medical Society held its regular meeting Tuesday, November 30, at the Warden Hotel, Newark. The scientific session was addressed by Dr. Ralph Pickett on "The Treatment of Compound Fractures".—Arthur J. Tronstein, M.D., correspondent for *The Journal.*

MORGAN

Dr. Earl H. Baxter, Columbus, was the speaker at a meeting of the Morgan County Medical Society, Tuesday evening, October 26, at the Kennebec Hotel, McConnelsville.

The society was addressed by Dr. John B. Alcorn, Columbus, President of the Ohio State Medical Association, at a meeting on November 23.—News clipping.

MUSKINGUM

Dr. Ward D. Coffman spoke on "A Recent Trip to Europe", at a meeting of the Muskingum County Academy of Medicine, November 3, at the University Club, Zanesville. Dr. Coffman described the hospitals and clinics which he visited in Western Europe and the British Isles.—News clipping.

PERRY

"Food Allergy", was the topic discussed by Dr. H. M. Clodfelter, Columbus, at a meeting of the Perry County Medical Society, Thursday noon, December 16, at the Park Hotel, New Lexington. —F. J. Crosbie, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

GALLIA

At a meeting of the Gallia County Medical Society, Wednesday evening, December 1, at Holzer

Hospital, Gallipolis, four motion pictures were shown of abdominal and chest operations.

The society elected the following Gallipolis physicians as officers for the ensuing year: Dr. F. W. Shane, president; Dr. N. A. Martin, vice-president; Dr. Milo Wilson, secretary-treasurer; Dr. Charles E. Holzer, legislative committeeman; Dr. H. B. Thomas, public relations committeeman; Dr. Leo C. Bean, medical economics committeeman; Dr. W. Lewis Brown, delegate; and Dr. S. L. Bossard, alternate.—Milo Wilson, M.D., secretary.

HOCKING

Officers of the Hocking County Medical Society for 1938 are: Dr. C. F. Shonk, Logan, president; Dr. C. T. Grattidge, Laurelville, vice-president; Dr. M. H. Cherrington, secretary-treasurer; Dr. J. S. Cherrington, Logan, legislative committeeman; Dr. Allen A. Cole, Logan, delegate; Dr. C. T. Grattidge, alternate.

Dr. John A. Riebel, Jr., Columbus, made a splendid address on "Practical Endocrinology", at a meeting of the society, Thursday, December 9, at Cherrington Hospital, Logan.—M. H. Cherrington, M.D., secretary.

JACKSON

Officers of the Jackson County Medical Society for 1938 are: Dr. G. A. Parry, Jackson, president; Dr. J. L. Frazer, Wellston, secretary-treasurer; Dr. H. W. Gillen, Wellston, legislative committeeman; Dr. W. B. Taylor, Jackson, public relations committeeman; Dr. Melville D. Smith, Wellston, medical economics committeeman; Dr. J. S. Hunter, Jackson, delegate; and Dr. J. J. McClung, Jackson, alternate.—J. L. Frazer, M.D., secretary.

PIKE

Pike County Medical Society has elected the following officers for 1938: Dr. R. T. Leever, Waverly, president; Dr. M. E. Moore, Piketon, vice-president; Dr. A. M. Shrader, Waverly, secretary-treasurer; Dr. Leever, legislative committeeman; Dr. L. E. Wills, Waverly, delegate; and Dr. R. M. Andre, Waverly, alternate.—A. M. Shrader, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

CRAWFORD

Dr. C. C. Sherburne, Columbus, Councilor for the Tenth District of the Ohio State Medical Association, discussed various current problems of the medical profession at a meeting of the Crawford County Medical Society, at Bucyrus City Hospital, Monday night, December 6.

The society elected the following officers for 1938: Dr. C. H. King, Bucyrus, president; Dr. M. L. Helfrich, Galion, vice-president; Dr. O. R. Kackley, Galion, secretary-treasurer; Dr. W. G. Carlisle, Bucyrus, legislative and public relations committeeman; Dr. C. A. Marquart, Crestline, delegate; and Dr. R. J. Caton, Bucyrus, alternate. —D. D. Bibler, M.D., retiring secretary.

FRANKLIN

The following programs were presented by the Columbus Academy of Medicine during December:

December 6—"Some of the Newer Concepts in the Field of Endocrines", by Dr. Andre Crotti.

December 20—Annual Banquet. "Dusty" Miller, Wilmington, spoke on "Attitudes".—Bulletin.

MORROW

Dr. C. C. Sherburne, Columbus, Councilor for the Tenth District of the Ohio State Medical Association, gave a very interesting talk on State Association activities at a dinner meeting of the Morrow County Medcal Society, Tuesday, December 14, at Mt. Gilead.

The society elected the following officers for 1938: Dr. E. C. Sherman, Cardington, president; Dr. C. S. Jackson, Mt. Gilead, vice-president; Dr. T. Caris, Mt. Gilead, secretary; Dr. R. L. Pierce, treasurer and legislative committeeman; Dr. F. H. Sweeney, Mt. Gilead, public relations committeeman; Dr. J. P. Ingmire, Mt. Gilead, medical economics committeeman; Dr. F. M. Hartsook, Cardington, delegate; and Dr. Lowell Murphy, Cardington, alternate.—T. Caris, M.D., secretary.

ROSS

Dr. Clifford J. Straehley, Cincinnati, spoke on "The Importance of Syphilis, Pernicious Anemia and Hyperthyroidism in Heart Diseases", at a meeting of the Ross County Medical Society, Thursday evening, December 2, at the Warner Hotel, Chillicothe.

Officers elected for the coming year are: Dr. Warde B. Smith, Frankfort, president; Dr. George S. Mytinger, Chillicothe, vice-president; Dr. A. E. Merkle, Chillicothe, secretary-treasurer; Dr. L. E. Hoyt, Chillicothe, legislative, public relations, and medical economics committeeman; Dr. O. P. Tatman, Chillicothe, delegate; and Dr. R. L. Counts, Chillicothe, alternate.—A. E. Merkle, M.D., secretary.

Open New Offices

Among physicians who have recently opened offices in Ohio are the following: Dr. Neal D. Carter, Marion; Dr. Charles Bender, Fostoria; Dr. Wilbur F. Stewart, Fostoria; Dr. K. P. Scott and Dr. Malcolm Boylan, Elyria; Dr. J. F. Dulick, Struthers; Dr. Jacob Shapiro, Delphos; Dr. George Roberts, Logan; Dr. H. A. Burstein, Toledo; Dr. C. C. Henrie, Celina; Dr. D. S. McDill, Philo, and Dr. Charles A. Hoffman, Ironton.

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IN MEMORIAM

Samuel S. P. Barnes, M.D., Massillon; Jefferson Medical College, Philadelphia, 1876; aged 83; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 23. Dr. Barnes, a former president of the Stark County Medical Society, had practiced in Massillon since 1869. He was a member of the Methodist Church. His widow and a brother survive.

George Byron Brown, M.D., Portsmouth; Bellevue Hospital Medical College, 1897; aged 65; member of the Ohio State Medical Association and the American Medical Association; died November 21. Dr. Brown practiced in Yonkers, N. Y., for 15 years, and during the World War served overseas as an officer in the Medical Corps of the U. S. Army. He came to Portsmouth in 1921, and was a member and former chief-of-staff of Mercy Hospital. Dr. Brown was a member of the Masonic Order, Episcopal Church, the Elks, Modern Woodmen, Royal Neighbors and the American Legion. Surviving are his widow and a sister.

Jefferson C. Crossland, M.D., Zanesville; Medical College of Ohio, Cincinnati, 1887; aged 78; member of the Ohio State Medical Association and the American Medical Association; died December 7. Dr. Crossland practiced in Zanesville for 50 years. For 15 years he was a member of the State Board of Health, having been appointed by Governor Asa S. Bushnell and reappointed by Governors Nash, Herrick and Harmon. Dr. Crossland was a member of the city board of education for four years, and during the World War was identified with the medical section of the Council of National Defense. He was a member of the Masonic Order. His widow and two sons survive.

Edward Herbst, M.D., Columbus; Columbus Medical College, 1884; aged 73; member of the Ohio State Medical Association and the American Medical Association; died November 2. Dr. Herbst practiced in Columbus for 50 years, and for the past ten years was on the staff at Columbus State Hospital. During the World War he was on duty with the U. S. Army as physician at Camp Oglethorpe, Georgia. His widow, one daughter and two sons survive.

Frederic Wade Hitchings, M.D., Cleveland; Harvard University Medical School, 1905; aged 57; member of the Ohio State Medical Association and the American Medical Association; died November 12. Dr. Hitchings practiced in Cleveland for 30 years. His hobby was art, particularly handmade jewelry, which he had displayed in many museums and exhibitions. He was also an authority on stamp collections. His widow and two daughters survive.

Stanley Richard Hutchings, M.D., Springfield; University of Vermont College of Medicine, Burlington, Vt., 1896; aged 68; member of the Ohio State Medical Association and the American Medical Association; died November 5. A former president of the Clark County Medical Society, Dr. Hutchings practiced in Springfield for 40 years. He was a member of the Springfield Board of Education for 18 years, and was a lieutenant in the Medical Corps of the U. S. Army during the World War. Dr. Hutchings was a member of the Masonic Order, the J.O.U.A.M., and the Elks. Surviving are his widow, two daughters, one son and three brothers.

Frank Lee Klopfenstein, M.D., Toledo; Toledo Medical College, 1910; aged 66; member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 13. Dr. Klopfenstein practiced in Toledo for 27 years. He was a member of the Philatelic Society and the Baptist Church. His widow, four daughters, and two sons—Dr. A. Rees Klopfenstein, Toledo, and Dr. Morris D. Klopfenstein, Ann Arbor, Michigan, survive.

Frank M. McCafferty, M.D., Toledo; Ohio Medical University, Columbus, 1895; aged 71; member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 14. Dr. McCafferty practiced in Columbus for 23 years, and later was on the medical staff of several state institutions, including the Dayton and Gallipolis state hospitals, Boys' Industrial School, Lancaster, and for the past 10 years at Toledo State Hospital. He was a member of the Oddfellows, Knights of Pythias and the Central Presbyterian Church. His widow, two sons, a sister and three brothers survive.

Benjamin W. Patrick, M.D., Toledo; Toledo Medical College, 1903; member of the Ohio State Medical Association and the American Medical Association; died November 22. Dr. Patrick was a member of the staff of Mercy Hospital, Toledo, where he practiced 34 years. He was a member of the Masonic Order. His widow and two sons survive.

Charles H. Robinson, M.D., Columbus; Hahnemann Medical College and Hospital, Philadelphia, 1937; aged 27; died December 10. Dr. Robinson, an intern at White Cross Hospital, died of cerebro-spinal meningitis after an illness of four



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days. He was a native of Washington, C. H. Surviving are his widow, two children and his parents.

Tunison T. Rosendale, M.D., Fostoria; Western Reserve University School of Medicine, 1893; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 22. Dr. Rosendale followed his father in the practice of medicine at Fostoria and continued there for 45 years. He was also prominent in the civic affairs of the community. His daughter and a son—Dr. Maxwell Rosendale, New York City, survive.

Robert Judson Sharp, M.D., Columbus; New York University Medical College, 1883; aged 83; died December 15. One of the city's oldest practicing physicians, Dr. Sharp had practiced medicine for 54 years, the past 30 years in Columbus. A daughter survives.

John William Spillman, M.D., Amsterdam; Baltimore Medical College, 1905; aged 59; died November 17. Dr. Spillman was a former resident of Dell Roy and Sistersville, W. Va. He had practiced in Amsterdam for two years. Surviving are his widow, three daughters and two sons.

Catherine Vickers, M.D., Cleveland; Ohio Medcal University, Columbus, 1898; aged 74; died November 24. Dr. Vickers practiced in Cleveland for 30 years. Surviving are two daughters and two sisters.

Robert Walter Williams, M.D., Cleveland; Cleveland College of Physicians and Surgeons, 1899; aged 65; member of the Ohio State Medical Association and the American Medical Association; died October 30. Dr. Williams retired because of ill health early last year after having practiced in Cleveland for 37 years. During the World War, he was a major and regimental surgeon of the 332nd Field Artillery at Camp Sherman. Dr. Williams was a member and past president of the Cleveland Grays, as well as past commander of the Shupe Machine Gun Post of the American Legion. His widow survives.

Reject Bill To Legalize Euthanasia

A bill to legalize euthanasia was recently rejected by a committee of Nebraska's new unicameral legislature. Sponsored by a woman physician, the bill provided that any adult person suffering from a painful or incurable disease might apply to a district judge for the appointment of a commission consisting of two physicians and a lawyer to study the case and recommend action. If the commission advised death, and its decision was approved by the judge, the attending physician could administer the lethal stroke.

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In the establishment of dietary regimes which will be protective against vitamin deficiencies, commercially canned foods may play an important part. Several hundred canned foods are available upon the American market at all seasons of the year. Nutritional research has shown (3) that modern canned foods retain in good degree the vitamin B1 contents of the raw materials from which they were prepared. This great class of foods—available to all consumers regardless of economic status—will contribute substantially to the alleviation and prevention of latent avitaminosis B1 in this country.

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1a. 1935. J. Am. Med. Assn. 105, 1580.
b. 1934. The Vitamin B Requirement of Man, G. R. Cowgill, The Yale University Press, New Haven.

2. 1937. J. Am. Diet. Assn. 13, 195.

3. 1936. J. Nutrition 11, 383.
1934. Ibid. 8, 449.
1932. Ibid. 5, 307.
1932. Ind. Eng. Chem. 24, 457

This is the thirty-second in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.

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THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

The Citadel. By A. J. Cronin, M.D. $2.50. Little, Brown & Company, Boston, Mass. pp. 401.

The hero, Dr. Andrew Manson, begins his practice in socialized system of medicine in the Welsh mining communities, then to a job in government research and thence to private practice in London. All sorts of physicians and medicine as practiced in England is criticized.

The tremendous popularity of this book in America is not necessarily due to the clever press agent who has been assiduously preparing the way for the motion picture to follow, but rather because it is a very well written novel. Nor do we physicians need to get touchy about its criticism. Its criticisms are primarily those of a headstrong individualist who tries to keep his ideals and must naturally find trouble in making his social adjustments. In fact, he just cannot do this but goes from one field of medicine to another seeking the spot where he will not be compelled to compromise with others.

The type of man whom American medical schools are now selecting follows pretty close to the pattern of Dr. Manson. These rather asocial doctors are going to have a mighty hard time becoming physicians and in their impatience with others for not adopting their ideals are going in larger and larger groups after strange gods ("The Committee of 430" and such).

The Normal Encephalogram. By Leo M. Davidoff, M.D., and Cornelius G. Dyke, M.D. $5.50. Lea and Febiger, Philadelphia, 1937. pp. 224.

Over a number of years these two workers have published several monographs, principally in the Bulletin of the New York Neurological Institute, detailing the many refinements which they have developed in normal and abnormal encephalography. They have now incorporated their observations of encephalographic anatomy into this book and it is naturally implied that "The Normal Encephalogram" will be shortly followed by a sister volume dealing with pathological states within the intracranial cavity.

Noteworthy is the historical introduction, the demonstration of the various techniques and the theories explaining the clinical reactions to encephalography. The authors have long been known for their originality in delineating the subarachnoid cisterns and the structures in close relation to the corpus callosum and for their visualization of such fine structures as the quadrigeminate bodies, the fornix and the interventricular foramina. No one should attempt this useful diagnostic technique who has not familiarized himself thoroughly with the contents of this timely book, be he neurologist, neurosurgeon, pediatrician, or psychiatrist. It is the last word on the subject of encephalography.—L. J. Karnosh, M.D.

Artificial Fever Produced by Physical Means; Its Development and Application. By Clarence A. Neyman, M.D., associate professor of psychiatry in Northwestern University. $6.00. C. C. Thomas, Springfield, Ill. 1937; pp. 294.

This is an attempt of one of the many scientists who are now engaged in a study of this form of therapy to compile and correlate the work of his confreres in the field. It is the work of reference for the subject of fever therapy. In addition, it is easily readable.

Short-Wave Diathermy. By Tibor de Cholnoky, M.D., associate in surgery, New York Post-Graduate Medical School, Columbia University. $4.00. Columbia University Press, 1937; pp. 310.

This volume is an outline of the subject in the survey of the laboratory and clinical work that have so far been carried out. It is therefore a necessity to every physician in this new field of physical therapy.

The Business Side of Medical Practice. By Theodore Wiprud, executive secretary of the Medical Society of Milwaukee County. $2.50. W. B. Saunders Company, Philadelphia, Pa., 1937; pp. 177.

A book which all should read. See page 86 of this issue of *The Journal* for further consideration of its contents.

Practical Proctology. By Louis A. Buie, M.D., head of the Section on Proctology, of the Mayo Clinic. $6.50. W. B. Saunders Comapny, 1937; pp. 512.

A complete up-to-date discussion of this field which all too many of us tend to neglect in our practice. It should be read by every physician who diagnoses and treats the sick.

Take Care of Yourself. By Jerome W. Ephriam. $2.00. Simon and Schuster, New York, 1937; pp. 288.

This book is presented as a guide to a practical way to use and the prudent way to buy home remedies and cosmetics. It can be recommended to laymen for advice in the matter of dentifrice, mouth washes, hair tonic, soap, salves and antiseptics. There are also chapters on how to shave,

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how to get a tan without a burn, how to have foot comfort. The management of the common cold; avoidance of indigestion; safe weight reduction; simple rules for inducing sleep; hangovers and how to avoid them, are titles of the succeeding chapters which can also be recommended.

Safely Through Childbirth. By A. J. Rogny, M.D $2.00. Emerson Books, Inc., New York, 1937. pp. 192.

Frequently the doctor is asked by the pregnant woman if he has a text book on obstetrics that she may read. The regular books on obstetrics are usually too scientific and frightening for the layman and in those cases "Safely Through Childbirth", may be recommended.

This book describes the anatomy of the female reproductive organs and the physiology of pregnancy, labor, and puerperium in understandable language. It also devotes some chapters to prenatal and postnatal care and I think these chapters are most valuable to the pregnant woman of any in the book.—H. W. Koerper, M.D.

The Traffic in Health. By Charles Solomon, M.D., assistant clinical professor of medicine, Long Island College of Medicine, Brooklyn. $2.75. Navarre Publishing Company, Inc., New York, 1937; pp. 393.

While Ephriam in the book review above has attempted to teach laymen to get their money's worth in buying dentifrices, mouth washes, soaps and household remedies, the author of this book attempts to expose the patent medicine racket as it affects our lives today. It can be recommended to those who are or can be interested in this subject.

Synopsis of Genitourinary Diseases. By Austin I. Dodson, M.D., professor of genitourinary diseases, Medical College of Virginia, Richmond. Second edition, $3.00. The C. V. Mosby Company, St. Louis, 1937; pp. 294.

The second edition of this valuable synopsis includes some recent advances in treatment, especially regulation of the diet. There also has been added a presentation of neurogenic and functional disturbances of the bladder, as well as excellent discussion of fundamental disturbance of the male sexual system.

L'Embolie Pulmonaire. Recherches Cliniques, Anatomiques Pathogéniques et Thérapeutiques sur les Embolies et les infarctus du poumon. Pierre Bardin. 192 pp. Paris: Masson et Cie, 1937. 35 Fr. Francs.

This monograph, tastefully bound in paper, printed on heavy stock, selling for about $1.25, serves to emphasize the need we have in this country for less expensive medical books. However, anyone with even a rudimentary knowledge of French will be surprised at the ease with which the translation can be made and he can avail himself of these publications until such a time as American publishers realize that medical interests can be well served by similar volumes.

This book is an interesting and useful contribution for both medical and surgical men. It contains an index and a bibliography of 438 articles up to July, 1936. It makes no mention of the electrocardiographic changes which are receiving considerable attention in this country, but is otherwise quite complete.

The work is packed with important and useful information of which the following are particularly interesting to the reviewer:

"The radiological examination besides being

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The swaddled infant pictured at right is one of the famous works in terra cotta exquisitely modeled by the fifteenth century Italian sculptor, Andrea della Robbia. In that day infants were bandaged from birth to preserve the symmetry of their bodies, but still the gibbous spine and distorted limbs of severe rickets often made their appearance.



A bambino from the Foundling Hospital, Florence, Italy,—A. della Robbia

Glisson, writing in 1671, described an ingenious use of swaddling bands — "first crossing the Brest and coming under the Armpits, then about the Head and under the Chin and then receiving the hands by two handles, so that it is a pleasure to see the Child hanging pendulous in the Air . . . This kind of Excercise . . . helpeth to restore the crooked Bones. . . ."

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"This is observed to happen more in the neighborhood of Rome than in other places," he wrote. "If no one oversees the infant's movements, his limbs do in the generality of cases become twisted. . . . Hence, when he first begins to sit he must be propped by swathings of bandages. . . ." Hundreds of years later swaddling was still prevalent in Italy, as attested by the sculptures of the della Robbias and their contemporaries. For infants who were strong Glisson suggested placing "Leaden Shooes" on their feet and suspending them with swaddling bands in mid-air.

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potentially dangerous, is inferior to other methods of examination in differential diagnosis."

He points out that experimentally he has succeeded in obtaining from very small infarcts, dyspnea, collapse and death which he attributes to an irritation of the nervous reflex mechanism of the pulmonary circulation. It is for this reason that he does not feel that pulmonary embolectomy, of which he has collected nine successful cases out of 130 attempted, will ever be of much value.

He does not believe that the type of anesthesia plays any part in the etiology of embolus or thrombosis. He presents many animal experiments and several case histories of pulmonary emboli where the use of atropine, together with ephedrine and large doses of bicarbonate of soda, have seemed to result in remarkable clinical improvement.

This work merits the careful consideration of everyone interested in this subject.—Robert C. Kirk, M.D.

Diseases of the Nervous System in Infancy. By Frank R. Ford, M.D., associate professor of neurology, Johns Hopkins University. $8.50. C. C. Thomas, Springfield, Illinois. 1937; pp. 953.

This book serves to impress us with the fact that no specialty is sufficient unto itself. In this little cultivated field, both the neurologist and the pediatrician will find in this volume the help they will need in their cooperative efforts to solve these problems. Its reading is easy and interesting to the rest of us.

A Mind Restored; The Story of Jim Curran. By Elsa Krauch. $2.50. G. P. Putnam's Sons, New York, 1937.

Another addition to that lengthening procession of pathobiographies wherein an ex-patient records his experiences while running a psychotic gamut. In many respects it should be given a place at the head of the procession.

It is the story of a one-time patient in a state hospital for the insane, suffering with a mid-life depression. For one thing it rings clinically true: it does not, like many others, over-dramatize a single psychotic episode, but portrays faithfully the surgings and cyclings which gradually gain amplitude to the point when a true melancholia envelops its victim. The "cascade" course which the process assumes, its subjective terrors, the jerky convalescence and the frank recognition that its fundamental elements are of endogenous rather than purely environmental origin mark it as apart from the usual pot-boilers on this subject in which there is often a studied attempt to synthesize a psychosis.

The writer wisely emphasizes the folly—of which even physicians are guilty—of mistaking

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Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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early melancholia for laziness or wilful evasiveness, "because there are no physical findings", and of applying exhortation and other psychological strategies to patients who are overwhelmed with animative inertia.

In his fine tribute to the solid work done in the state hospitals the author has done much to desensitize public opinion about such institutions where, in spite of the lack of oriental rugs and glamorous "psycho-dynamic trappings", patients are cured as often as they are in expensive private sanitaria.—L. J. Karnosh, M.D.

Recent Advances in the Study of Rheumatism. By Frederic John Poynton, M.D., F.C.R.P., consulting physician to University College Hospital, London, England; and Bernard Schlesinger, M.A., M.D., F.A.C.P., physician to the Children's Department, Royal Northern Hospital. Second edition. $5.00. P. Blakiston's Son & Co., Inc., Philadelphia, 1937; pp. 380.

In this edition considerable emphasis has been placed on acute rheumatism in children and on the industrial aspect of rheumatism. This book belongs in the library of every physician who is interested in rheumatism, and who is not?

The Cost of Adequate Medical Care. By Samuel Bradbury, M.D. $1.00. The University of Chicago Press, 1937. pp. 86.

This is a book to be read by every socially minded physician. The Lee-Jones Study attempted to define what is adequate medical care. This study takes up where that left off. The service set forth in that study is translated in cost through computation using the minimum fees printed in the 1933-34 Blue Book of the Chicago Medical Society.

Early Medieval Medicine. With Special Reference to France and Chartres. By L. C. MacKinney, Ph.D., professor of medieval history in the University of North Carolina. $2.75. The Johns Hopkins Press, Baltimore, 1937. pp. 245.

This is the third of the Hideyo Noguchi Lectures. It is a discussion of the nontechnical aspects of medical practice in the early centuries and interprets its development as an integral part of the beginning of modern western civilization. It is therefore another contribution to the history of medicine because it is not only medicine, but because it is also history.

Methods of Treatment. By Logan Clendening, M.D. Sixth edition, $10.00. C. V. Mosby Co., St. Louis, 1937; p. 859.

A remarkable book on the when, what and why of therapeutics. Not only drugs but all forms of therapy are described in detail. The first part of the book gives the methods of using, and the exact details of applying such therapeutic aids as rest, drugs, bacterial therapy, glandular therapy, dietetics, physio-therapy, and psycho-therapy.

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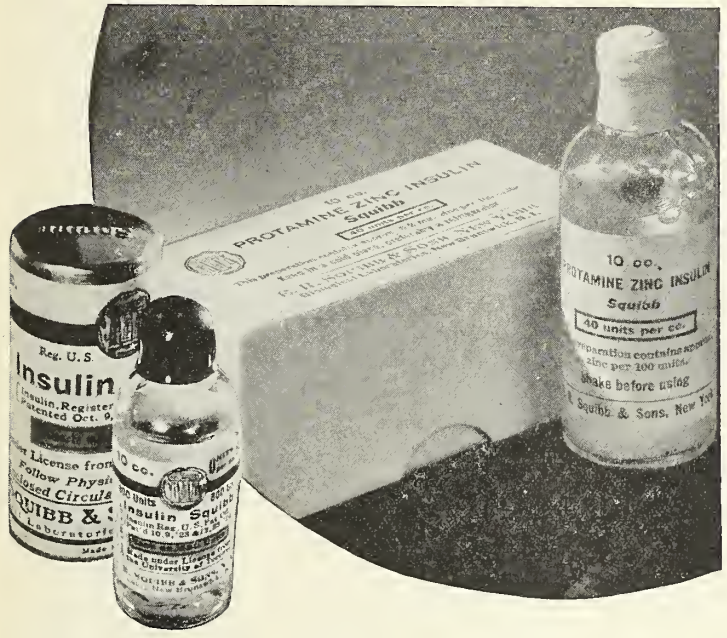




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A Chart to Show the Range of Motion of the Joints of the Extremities. Published by The Medical Society of the State of Pennsylvania; prepared by its Committee on Physical Therapy.

This consists of a chart 14¾ x 17 inches which has diagramatic sketches of the joints of the extremities and shows the ranges of motion in degrees with instructions on the method of measurement. It illustrates in simple terms the normal motion and should be on the walls of the examination room of anyone engaged in industrial or orthopedic surgery. The use of this chart will aid in keeping an accurate record of disability and allow one to measure improvement in function.—H. P. Worstell, M.D.

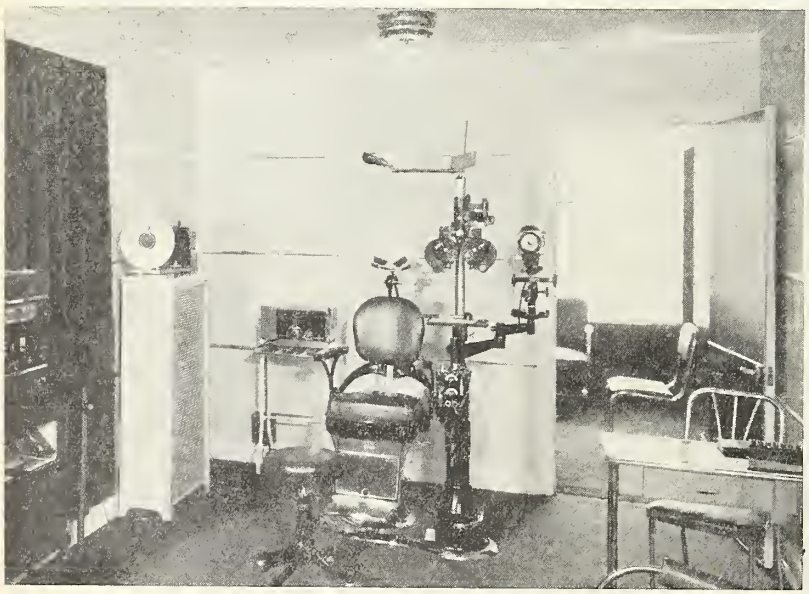
Public Medical Services. A survey of tax-supported medical care in the United States. By Michael M. Davis. $1.50. The University of Chicago Press, 1937. pp. 165.

The book presents a complete description of public medical care in this country. The survey includes services furnished to dependents and non-dependents in their homes, in hospitals, clinics, public health, education and other agencies. Those who want to know about the ever-increasing use of tax money for medical care should have this book in their own reference library.

An Introduction to Medical Science. By William Boyd, M. D., M. R. C. P. (Edin.) F. R. C. O. (Lond.), professor of pathology in the University of Manitoba. $3.50. Lea and Febiger, Philadelphia, 1937. pp. 307.

In this aeroplane view of disease, the author of the justly popular current texts on pathology has attempted to present a workable text to the layman by the use of which he may gain a com-

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prehension of the processes of the body and their disorders. It is most heartily recommended, both to the patient and office attendant.

Pseudocyesis. By George Davis Biven, Ph.D., and M. Pauline Klinger, M.A. $4.00. The Principia Press, Inc., Bloomington, Ind., 1937. pp. 265.

This is a most complete and comprehensive review and study of this interesting nervous disorder. The volume belongs in every library on sex and on obstetrics.

Diseases of the Soft Structures of the Teeth and Their Treatment. By Hermann Prinz, A.M., D.D.S., M.D., D.Sc., professor of medicine and therapeutics in the University of Pennsylvania. Second edition, revised. $6.50. Lea and Febiger, Philadelphia, 1937. pp. 498.

An excellent text which should be read by every physician who wants up-to-date information upon this subject. Well systematized and as free as possible of controversial matter.

Medical State Board Examinations: Topical Summaries and Answers. By Harold Rypins, M.D., secretary, New York State Board of Medical Examiners; member, National Board of Medical Examiners. Third edition. $4.50. J. B. Lippincott Company, Philadelphia, 1937. pp. 450.

A good practical book to be used in a sensible preparation for examination of medical licensure. It is highly recommended for the purpose for which it was designed.

Psychiatric Nursing. By Wm. S. Sadler, M.D., chief psychiatrist and director, The Chicago Institute of Research and Diagnosis, in collaboration with Lena Sadler, M.D., associate director, and Anna B. Kellogg, R.N., chief of nurses, of the Institute. $2.75. The C. V. Mosby Company, St. Louis, 1937. pp. 433.

Text designed to meet the requirements of modern training in the subject, divided into four parts: I. The Approach to Mental Hygiene; II. Human Personality; III. Nursing the Psychoses; and IV. Psychotherapeutics. It is recommended.

Ten Million Americans Have It! By S. William Becker, M.D., associate professor of dermatology and syphilology in the University of Chicago. $1.35. J. B. Lippincott Company, Philadelphia, 1937. pp. 220.

A timely treatise for the lay public. It is authoritative. It is especially recommended as a book to put in the hands of the intelligent syphilitic patient.

The Span of Life. By William Marias Malisoff, Ph.D. $2.50. J. B. Lippincott Company, Philadelphia, Pa., 1937; pp. 340.

This book is based upon the possibility of prolonging the span of human life to at least 100 years. The author is known for his work in producing arterial degeneration in rabbits. The chap-

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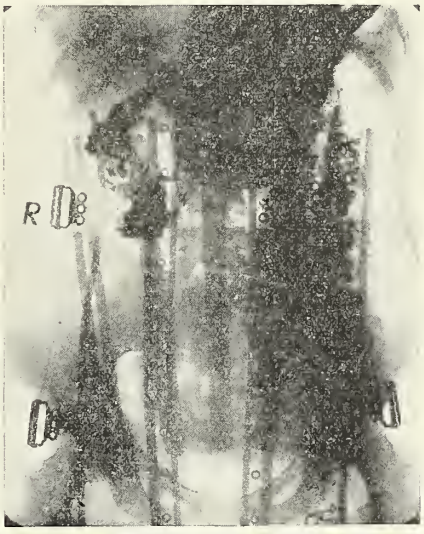
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*CORCORAN, New York State Journal of Medicine, Jan. 1, 1930

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ter titles well indicate the scope of the volumes; Methuselahs All, The Product of Old Age, Fixing the Span of Life, The Phenomenon of Life, Aging and Its Theories, Life Prolongation and Rejuvenescence, Projects in Optimism, and Possibilities. It is to be recommended for its conservative tone as well as for its sensible optimism.

Concepts and Problems of Psychotherapy. By Leland E. Hinsie, M. D., professor of clinical psychiatry in Columbia University. $2.75. Columbia University Press, 1937. pp. 191.

A concise evaluation of the present schools of thought and therapy in psychiatry. The book is recommended.

Sexual Power. By C. T. Stone, M.D. $1.50. D. Appleton-Century Company, New York, 1937; pp. 172.

An exposition of the factors involved in impotency with chapter on the psychic and physical causes, the role of hormones, and how efficiency can be maintained to the fullest degree.

Man, Bread and Destiny. By C. C. Furnas and S. M. Furnas. $3.00. Reynal and Hitchcock, New York, 1937; pp. 364.

The author of "The Next Hundred Years" writes here in collaboration with his wife the story of the part food has played through the ages in the development of the human race. The book is recommended to all who are interested in nutrition.

The Baby's First Two Years. By Richard M. Smith, M.D., assistant professor of pediatrics and child hygiene in the Harvard Medical School. $1.75. Revised edition. Houghton, Mifflin Company, Boston, Mass. 1937; pp. 121.

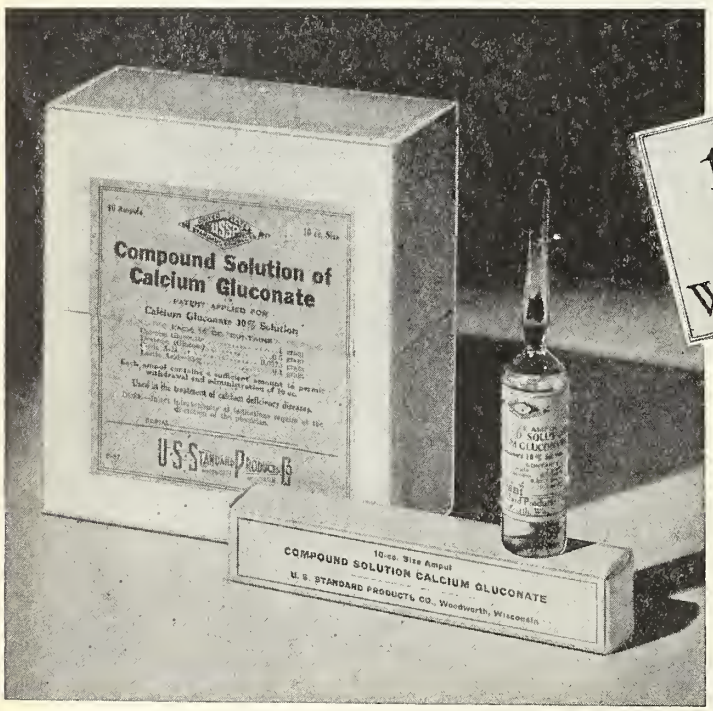
The appearance of the fourth edition of this book speaks for itself. It covers every phase of infant care in a manner that any mother can understand and in a way that is definite and sure.

Why Grow Old? By Frank S. Caprio, M.D. and Owsley Grant, M.D. $2.50. Maxwell Droke, Indianapolis, Ind. 1937; pp. 204.

A well planned and well written guide book for the man who seeks to remain physically and mentally young. It is the combined work of a psychiatrist and a urologist, and as such is a conservative statement of the problem which should prove helpful to the man past 40.

The Human Body. By Logan Clendening, M.D. $3.75. Third edition. A. A. Knopf, New York. 1937; pp. 443.

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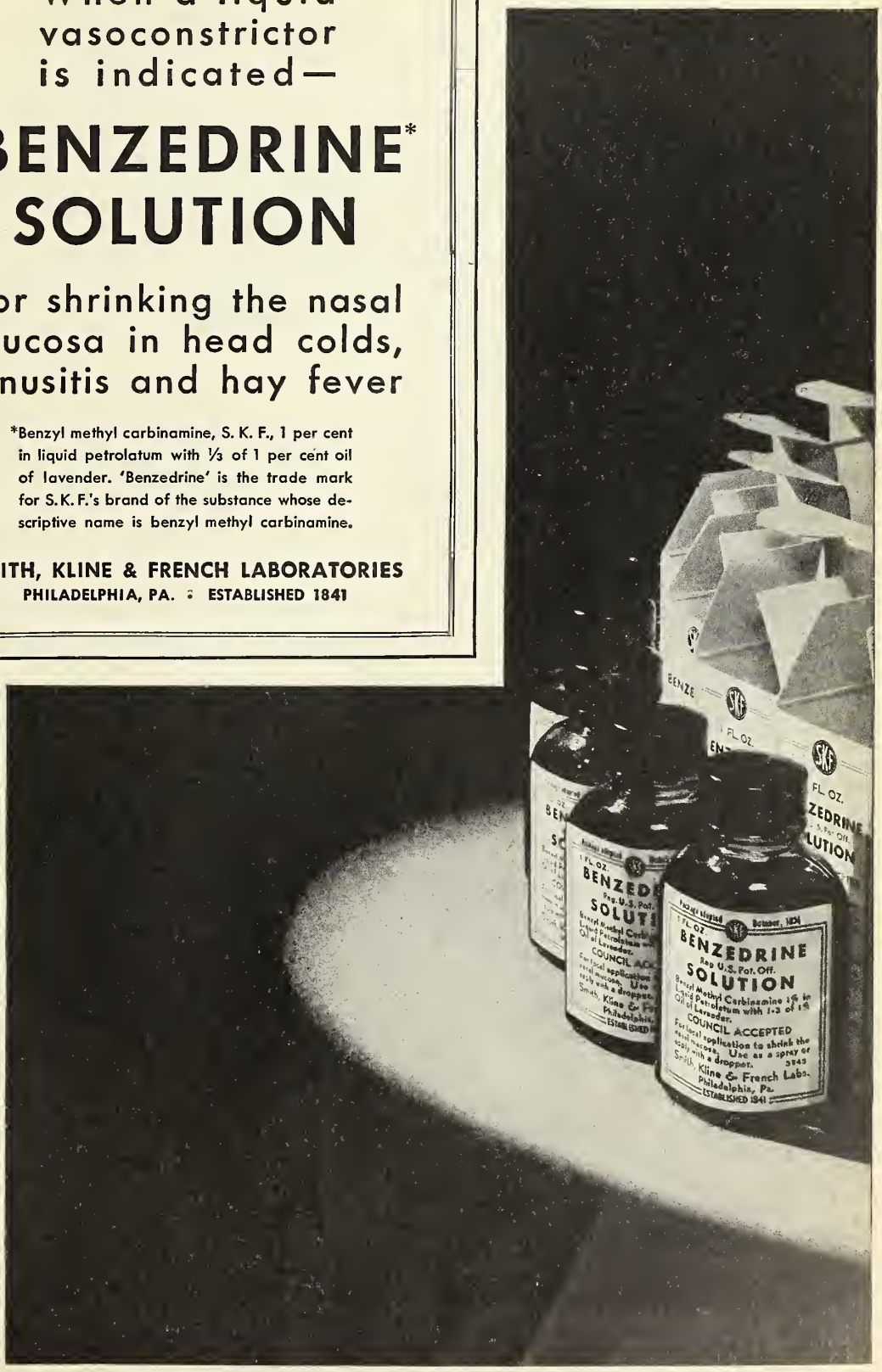
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NEWS NOTES

Ashtabula—Dr. William J. McCarthy found socialized medicine in Austria unsatisfactory to both patients and physicians, he told members of the Kiwanis Club when discussing the subject at a recent meeting.

Bowling Green—"The Safety Valves of Civilization" was the subject of an address made by Dr. H. J. Powell, county health commissioner, at a recent meeting of the Junto Club.

Canton—The subject of "Skin Cancer" was discussed recently by Dr. Emerson Gillespie at a meeting of the Kiwanis Club.

Chardon—For service rendered during the Ohio River flood last winter, Dr. W. C. Cory, Geauga County health commissioner, has been named an honorary citizen of Vanceburg and Lewis County, Kentucky.

Cincinnati—Dr. Elmer A. Schlueter has been appointed to the faculty of the Institutum Divi Thomae, archdiocesan graduate school of scientific research. Dr. Schlueter will lecture on physiology and will conduct research in the field of skin sensitizations.

Cleveland—Trustees of the Sight Saving Council include: Dr. Lee H. Ferguson, Dr. Joyce I. Hartman, Dr. Paul G. Moore and Dr. S. H. Monson.

Columbus—Dr. John B. Alcorn is the new president of the Association of War Surgeons of the United States.

Crestline—Dr. E. C. Brandt spoke on "Modern X-ray and Its Uses", at a recent meeting of the Kiwanis Club.

Dayton—"The General Health of the Child" was the subject of an address made by Dr. H. H. Williams, city health commissioner, at a recent meeting of the P.T.A.

Delaware—"Tuberculosis" was discussed by Dr. Louis Mark, Columbus, recently at a meeting of the Kiwanis Club.

Dover—Local physicians were hosts to their New Philadelphia colleagues at Dr. Max Shaweker's cabin for dinner recently, as a result of losing a bet on the Dover-New Philadelphia High School football game.

East Liverpool—Dr. C. H. Bailey was the speaker at the Armistice Day dinner of the local American Legion post.

Fostoria—A $50,000 bond issue for improvements to the City Hospital was approved at the November election.

Fremont—Dr. A. F. Schultz spoke on "Challenge to Civilization" at a recent meeting of the Kiwanis Club.

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1. Johnson, C. A.: A Study of Neo-Synephrin Hydrochloride in the Treatment of Acute Shock from Trauma or Hemorrhage, Surg. Gynec. and Obst. 63:35 (July) 1936.
2. Johnson, C. A.: Neo-Synephrin Hydrochloride in the Treatment of Hypotension and Shock from Trauma or Hemorrhage. Surg. Gynec. and Obst. 65:458 (Oct.) 1937.

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Galion—Dr. John M. Kidd spoke on "Life of an Intern" at a recent meeting of the Kiwanis Club.

Greenwich—Dr. Joseph A. McCready, who retired last year, recently celebrated his 90th birthday.

Lima—An illustrated lecture on "Poliomyelitis" was given by Dr. J. R. Tillotson at a recent district meeting of the Ohio State Nurses' Association.

Loudonville—At a recent meeting of the P. T. A., Dr. G. B. Fuller spoke on "Public Health".

Mansfield—Speakers at a recent district meeting of the Ohio State Nurses' Association included Dr. F. J. Heringhaus, Dr. Charles L. Shafer, Dr. S. C. Schiller and Dr. Frank H. Maxwell.

Middlefield—At a recent meeting of the Board of Trade, Dr. R. T. Odell, Middlefield, presented an illustrated lecture on "Preventing Blindness and Sight Saving".

Monroeville—Dr. M. L. Hindley, who has practiced medicine here for 36 years, was recently elected president of The Farmers & Citizens Banking Company.

New **Philadelphia**—Dr. Joseph Blickensderfer recently commemorated 50 years of practice by entertaining members of the Tuscarawas County Medical Society at a buffet supper at his home.

Piqua—"Health, Happiness and Longevity" was the subject of a talk made by Dr. John F. Beachler at a recent meeting of the Rotary Club.

Port Clinton—A suit has been filed in the Ottawa County Common Pleas Court to set aside the will of the late Howard B. Magruder which established a trust fund, estimated to amount to $200,000, for the purpose of establishing, equipping and maintaining a local hospital.

Strasburg—At a recent meeting of the Brotherhood Class of the St. Johns Evangelical Sunday School, Dr. Clare W. Smith spoke on "Venereal Diseases".

Toledo—Dr. William G. Gardiner has been named chairman of the University of Pennsylvania Bicentennial Committe for the Toledo area.

Upper Sandusky—Dr. B. A. Maloney was seriously injured in an automobile accident near Mansfield recently.

Wauseon—Dr. J. W. Nuzum, Chicago, Ill., was the lecturer at the second institute of the season of the DeEtta Harrison Detwiler Memorial Hospital.

Youngstown—"Theoretic and Basic Principles of the Wassermann Reaction" was the subject discussed by Dr. G. B. Kramer at a recent meeting of the Youngstown Society of Medical Technicians.

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THE DEPENDENCE OF INTERNAL MEDICINE UPON NEURO-PSYCHIATRIC IDEOLOGY

By E. C. FISCHBEIN, M.D., DAYTON, OHIO

AFTER many experiences in medicine and psychiatry extending over a period of more than 30 years, most of these experiences being in extra-mural psychiatry, I might be excused for offering a few ideas which have been forced on me. One looks back at the era of sterile descriptive, Kraepelinian psychiatry with distaste. The abandonment of this method of approach by some of us is complicated by the fact that unfortunately many psychiatrists of today retain this attitude and reject strenuously all ideas of a live, dynamic psychiatric science. The case becomes a little more complicated when it is realized that all problems in psychiatry have not only psychological, psychopathological and psychoanalytic angles but that internal medicine has an important place in the ideologic conception of mental diseases. The work of Wagner Von Jaurregg, of S. B. Broder and of Sakel closely link psychiatric methodology with internal medicine.

We must admit that psychiatry, a presumably dignified branch of knowledge, finds itself with most of its problems unsolved and like some other branches of knowledge, i.e., philosophy, religion and art which are only partly known and in flux, has turned to symbolism, thaumaturgy, dogma and rhetoric to smooth over and cover the tremendous hiatuses in knowledge.

All of us are familiar with the devotees of this new art who, equipped with a highly specialized but unfortunately not infallible method of approach are ready at any moment to discuss art, psychology, sociology, genetics, criminology and mental hygiene with dogma and scholasticism which is presumably final. The dogmatic statements of some of these authorities are sometimes based on wishful thinking and often blasted by experience. You remember the furore created by the studies in connection with the Kallikak and Jukes families; the positive statements that 90 per cent of criminality was due to feeble-mindedness; the assumption that mental testing would solve our problems in connection with delinquency; the assumption of infallibility by those in the fields of vocational guidance; the positive claims in the matter of child guidance, all for the most part fallacies, proved so by later experience. Only a few years ago the Gluecks showed that in the child guidance efforts of various clinics in New York 85 per cent were positive failures. So,

The Author

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Read before the Section on Nervous and Mental Diseases, Ohio State Medical Asociation, 91st Annual Meeting, Dayton, Ohio, April 28 and 29, 1937.

with this in mind let us abandon for the moment all pretense of scholasticism and authority and regard our problems impersonally and with reserve.

The picture is not as pessimistic as it seems. In the management of the psychoneuroses much progress has been made. With better and more enlightened instruction of the oncoming graduates more progress will be made in the care of these problems.

In the very near future a new and better approach to psychiatric problems will be made with the abandonment of the present attitude of Cartesian dogmatic dualism, that mind and body are two separate creations and that in spite of their interdependence they are unlike. We have all observed the pretenses of our friends the ortho-psychiatrists and their utter contempt for problems relating to the physical body.

Newer findings and better approaches will in the not very far future force us to face our problems on a basis of a close somato-psychic disability. Some of us have already adopted the attitude of Spinoza's body-mind identity; the one physical, the other mental but in spite of this, identical.

The schizophrenias without doubt warrant an approach on this basis. Who of us with experience with the cylothymias doubt that the hyper- and hypo-functional changes are on a physical basis, probably physio-chemical; who of us experienced with the involutional psychosis but feels that endocrine imbalance and chemical faults constitute the real problem?

We all admit that the psychobiologic drives of sex, of power, of self-preservation, etc., determine balance in living and that their inhibitions or frustrations produces extreme disturbances clinically recognizable.

These are the drives that have made and are still making history. The self-preservative, race-preservative, the drive to accomplish, the herd drive and religion.

And yet we must make a turn about and again take into consideration such prosaic things as endocrine changes, metabolism of protein, carbohydrates and fats, cell changes and water balance. Only in this direction lies the eventual solution of our perplexing problems in the psychoses.

When one stops to think that every seventieth person in the nation is wholly or partially insane, that the neuroses are almost as prevalent and as numerous as the common cold, that a stroll on the main street of any large city means passing a partially insane person every minute or so, the problem of nervous and mental diseases at once seems to loom as of tremendous importance. If in addition we remember that 50 per cent of the hospital beds in the United States are occupied by people suffering with nervous or mental disease and that the number of neuro-psychiatric cases are apparently increasing year by year, we must count the neuro-psychiatric diseases as of importance on a level with that of heart and blood vessel disease and cancer. While cardio-vascular disease and cancer occupy the first two positions in the matter of mortality, neuro-psychiatric diseases, less dangerous as regards death, are more numerous and are in a great many instances just as disabling.

With exception of a few medical schools, in better contact with modern needs and trends than usual, most colleges of medicine relegate neuro-psychiatry to a secondary position; it is a minor subject, given a relatively few hours. And so it has remained for years. For the most part no recognition is given to the fact that at least 50 per cent of the patients of every general practitioner present themselves with disorders due not to organic disease but to nervous or mental disorders, personality difficulties and the effects of life inhibitions and frustrations.

Very few of the graduates of the majority of medical colleges are prepared to care for or even understand the problems brought to them by these people. The inclination on the part of the ill-prepared physician is to regard these difficulties as minor affairs and to treat them slightingly. These young men are not good listeners and unprepared to understand. The result is a horde of irregular practitioners who take advantage of the situation to propose absurd methods of suggestive treatment which, in some cases, are actually productive of good results.

Some one has made the statement, which to me seems quite true, that every general practitioner could make a good living from the nervous patients that he rejects, were he prepared to care for them.

The psychoanalytic metapsychology about which so much has been written and discussed finds little if any appreciation in clinical problems. In many private practices it is non-existing. A very, very small number of the general run of physicians are prepared to recognize and evaluate functional conditions. Such commonly met abdominal mechanisms as anxieties, frustrations, inhibitions and defense mechanisms are not recognized as problems.

As has been said before in the clientele of the average general practitioner fully 50 per cent of patients come with complaints of illnesses which are entirely without the realm of organic disease. Owing to poor preparation on the part of these physicians, their examination and treatment runs along the lines of that for real organic disease. The results are always disappointing for both the physician and patient. The latter in desperation

resort to Christian Science or the ministrations of various irregular practitioners. Many of these nervous or mental disorders could have been properly helped had they received early attention by the neuro-psychiatrist. Unfortunately there are not enough psychiatrists to care for the hordes of people who need these ministrations. Many of the milder neuroses could be cared for by the internist if the latter had a fairly good grounding in the essential elements of psychology and psychiatry, enough, at least, to render him capable of understanding the problem before him.

Of all the medical schools in the United States only 21 per cent give courses deemed satisfactory in this specialty; in the other 79 per cent neuropsychiatry is a secondary and minor specialty given comparatively scant attention in time and effort. This in spite of the fact that the mental and nervous disorders exceed in number and often in importance any other disabling illnesses. In many medical institutions neurology and psychiatry are lumped together and taught by the same people. In many of the 79 per cent of colleges of medicine, neurology and psychiatry are only touched upon during the senior year. A minimum of time is given to psychology and psychopathology. In the neuro-psychiatry course of this substratum of medical colleges (nearly four-fifths of all) little attention is paid to the many factors that influence personality and the social and industrial maladjustments that the young medical man meets so early in his practice and which he is so unprepared to recognize. After graduation the young doctor recognizes the hiatuses in his training. He finds himself unprepared to recognize cases of imbalance and maladjustment and their fusion with medical and surgical aspects in the same patient.

In the last 25 years it has been recognized in a small group of medical institutions of learning that psychiatry is one of the fundamentals of medical training and not a secondary specialty. The larger group of colleges, however, remain, in the teaching of this branch of medicine, on an obsolete level.

This rather critical attitude toward four-fifths of the medical schools is justified because the situation in these is one of apparent laxity and indifference. Students are given no grounding in psychology, there is a fatal separation of the somatic and mental sciences, most of the effort being concentrated upon the teaching of diseases upon a classificatory basis. The consequence is that students approach their patients as cases and not as personalities-as-a-whole.

The great majority of men practicing medicine now and about 80 per cent of the graduates of our medical schools never approach their patient as a psychosomatic unit, they do not regard him as a biologic whole but as an individual with disease of one or several organs.

It is often difficult to convince colleagues that the psychic and soma are different facets of the same entity, that they are integrated to form a whole and that the reaction between the organism and the environment constitutes behaviour, and that this latter is the sum of the responses to stimuli from without and within.

The mind is a directing and unifying mechanism conserved in every reaction of the organism to stress. Many of the disease processes which present themselves for our consideration show variations of the function of the mind on levels which are reflex or tropismic or instinctive. These reactions deserve as careful consideration as the findings of a pathological laboratory in cases of somatic disease. The rejection of these factors on the part of internists leads to feelings of futility in the recognition of the problems to be dealt with.

We frequently encounter the more enlightened internists who endeavor to face their patient's problems by considering the psychic and emotional factors in addition to the somatic disease. Because of inadequate training these men depend on an outline of questions designed to aid them in arriving at conclusions regarding the patient's behaviour, attitudes and motivation. I can imagine no procedure more deadly in its effect of clouding the issues sought for. It substitutes a set mechanism which takes the place of thinking and tends to establish fixed and conventional habits of meeting these problems. In addition there is a tendency to project one's own attitudes and feelings into the problem and with the help of a patient all too willing to cooperate, obscure the picture entirely.

There is nothing, to my mind, more fallacious than the grouping of the psychoneuroses with the psychoses as gradations of similar processes of mental deterioration or disintegration. Quite often the former are referred to as the minor psychoses. One is reminded of the historical obscurantism in the differentiation of diseases. Many years ago, before the era of microscopic technic, the laity and even the physician grouped gonorrhea and syphilis together. We are doing the same today in the case of the psychoses and the psychoneuroses, the confusion being only slightly less so when we divide them into minor and major psychoses. I feel that in the not distant future the so-called neuroses or psychoneuroses will be recognized as a distinct group having their origin in troublesome unrecognized and unresolved psychological factors and that the psychosis will be acknowledged as admittedly organic in origin.

So far only paresis is so acknowledged. Of late certain of the schizophrenias have yielded to treatment along medical lines and with no re-

course to psychology. No one familiar with the cyclothymias can doubt for a moment that the manic and depressed phases with their concommitant symptoms of disturbances in psycho-motor activity, stream of thought and fields of activity are almost mirror-like in their opposition. Supreme activity as contrasted with extreme inactivity. In addition are the intervallary periods in which some of these patients are in all respects normal. In spite of the present view that these reactions result from unsatisfied and unresolved inner demands and problems the fact remains that this group of diseases has all the ear marks of an organic and not a psychologically conditioned disease process. Involutional melancholia, occurring only in connection with known failures in devolutional endocrine adjustment presents with symptoms monotonously the same in individuals of known varied background and intellectual endowment. These symptoms are as stereotyped as those of pneumonia or cardiac failure.

In the classification of the American Psychiatric Association there are 21 chief headings. Of these 14 are unquestionably of organic origin (traumatic psychoses, senile psychoses, psychoses with cerebral arterio-sclerosis, general paralysis, psychoses with cerebral syphilis, psychoses with Huntington's chorea, etc.) One is the so-called "undiagnosed psychoses", one "psychoses with mental deficiency". There are left only five headings, i.e., the schizophrenic reaction types, involutional melancholia, the emotional reaction types, the paranoias, and the defective types (endocrine, epileptic and defective). Of these only the first four need occupy our attention, the last being evidently organic in origin. These four postulate absence of "demonstrable organic disease". However, in view of our experience in the last several years it is not unreasonable to think of the first three of these as organic in their etiology. It will astonish no one if within the next decade methods are found to control the up and down phases in the cyclothymias.

There are already indications that some phases of the involutional changes can be modified with theelin and benzedrine administration; these effects are uncertain as yet and only occasional but in some cases undeniable. And so we are approaching the near future of the treatment of psychoses on a new and reasonable basis. The psychoneuroses are the stumbling block. They are very numerous and there are not nearly enough trained psychiatrists to care for them. In addititon the psychoanalytic approach to the problem of the care of the neuroses is cumbersome, slow, uncertain and suited to only a small percentage of those suffering with these illnesses. This small group shrinks still further in size when the necessity of meeting the financial outlay arises. On top of this have arisen esoteric cults, really offshoots of the psycho-analytic movement constantly preoccupied with phantom problems and differences of opinion far removed from the every day problem of getting patients well.

There is hope that in the very near future J. S. Horsley's narco-analysis with nembutal may help in the attack on this important group.

Summarizing, and if one is allowed to look a little ahead, the future promises, first, attack upon and solution of the problems of the psychoses which will to all present appearances, be on a basis of medical treatment with later attempts at guidance for readjustments to social and industrial needs.

It is doubtful in my mind if the future of the care of psychoneuroses will be solved by the present generation of orthopsychiatrists. One hopes that the teaching of neuro-psychiatry will become more enlightened in the various colleges of medicine, that neuro-psychiatry will be placed on a par with internal medicine and with surgery in the matter of time and effort devoted to teaching, and that a larger and better trained group will attack these problems slowly but persistently.

DISCUSSION

E. L. Hooper, M.D., Dayton, Ohio: It is encouraging to listen to the presentation of a subject such as this since it brings to mind the advances that have been made in the neuro-psychiatric field in recent years. Many of us can recall the time when such a topic would not have been thought of; prior to two decades ago it would have been difficult to convince any one that general medicine was dependent upon anything pertaining to psychiatry. The psychiatrist was then looked upon somewhat as a medical recluse, delegated to the care of what was regarded an unfortunate group, hopeless and helpless in so far as therapeutic efforts were concerned.

Thanks to the improvements that have been made in our methods of psychiatric approach, thanks to a better understanding of psychiatric problems, and thanks to an enlightened public, the neuro-psychiatrist has earned and now enjoys a professional standing on a level with his colleagues in the other fields of medicine. Since the fact has been generally accepted that the physical and psychic are so definitely interrelated that a separation of them should not be undertaken, it is likewise a generally accepted fact that if the general practitioner, internist, gastro-enterologist, the surgeon and the psychiatrist are to succeed in their individual efforts, they must work hand in hand.

While the psychiatrist is frequently warned by the internist and the surgeon lest he overlook possible physical factors, the psychiatrist is equally within his rights when he warns his professional brethren to be on his guard and not treat functional symptoms as organic and thus brand his patient with an everlasting and damaging psychic disability. The possibility of such dangers exist principally in the diagnosis and treatment of that vast army of persons afflicted with what someone has so aply termed the American Disease and which we classify as neuroses.

Dr. Fischbein has pointed out to us the fallacy

of grouping together the psychoses and neuroses in the belief that they differ only in degree of similar processes. Those of us who have been privileged to observe and study these two groups of patients know that they represent two separate and distinct clinical entities. The psychotic individual undergoes personality changes to the extent that he is no longer himself; not so in the victim of neuroses. His personality changes are of minor import and are quantitative rather than qualitative in nature, he remains in touch with his environment, and possesses insight into his condition.

Dr. Fischbein suggests his belief that all, or practically all of the psychoses have an organic basis. In that we will agree with him in part. I do not believe that all of the psychoses have their origin in physical factors per se: while some of them undoubtedly do, it is my opinion that in many o fthe psychoses, there is a fusion of basic factors and that the source of the trouble can be attributed to somato-psychic causes. In this I am thinking particularly of schizophrenia and paranoia.

Certainly we cannot doubt the fact that the neuroses are psychogenic in origin and functional in nature; of the entire field of neuro-psychiatry no phase of the work challenges the duty of the psychiatrist to the practice of medicine as does the consideration of this group of cases. In the diagnosis of this type of illness the discovery of the hidden unconscious pathology is just as important as it is for the internist or surgeon to locate a deep seated organic lesion. The emotional factors must be recognized and understood: to be able to do this, the physician must possess at least an elementary knowledge of psycho-pathology and utilize it in his diagnosis. Without this knowledge error in diagnosis is common, by reason of the fact that, in these conditions, subjective symptoms of a physical nature play such a prominent role in the symptom complex. Diagnosis is further clouded by the fact that many objective symptoms appear as if they were organic in origin, such as vasomotor disturbances, tachycardia, areas of anesthesia, paralyses, etc. Since the majority of these cases do not find their way to the mental hospitals for treatment, as do the psychoses, it is difficult and even impossible to determine by statistics the prevalence of this condition. Someone has estimated that of all patients found in the waiting rooms of the general practitioner, the surgeon, internist, gynecologist, etc., from 35 to 50 per cent are victims of neuroses; others place the estimate as high as 65 per cent. I believe the assumption is safe that, of all symptoms apparent in the general run of sick people, half of them have a subconscious or psychic origin.

Some idea of the increasing prevalence of the functional disorders may be gained from a comparison of the records of state hospitals in recent years. The records of the Dayton State Hospital show that in 1931 but 3 per cent of the total admissions were diagnosed as psychoneuroses, and that this rate was progressively increased until 1936 when 12 per cent of the number admitted were so diagnosed.

Dr. Fischbein's plea for the inclusion in the curriculum of the medical schools of a more adequate course of instruction in neuro-psychiatry is timely and endorsed wholeheartedly by all of us. Until the physician acquires a better understanding of the neuroses, the charlatan and the quack will continue to reap his harvest at a tremendous cost to the afflicted.

Technical and Professional Portions of X-ray Work

The X-ray examination is, and always has been, fundamentally a medical procedure. Roentgenology as a science is still in its infancy. The medical profession as a whole should not stand by idly while hospitals or short-sighted lay interests try to take over this phase of medical practice under the guise of calling it a technical procedure. The actual operation in surgery is in the same sense a technical procedure; auscultation and percussion are technical procedures; cystoscopic examinations are technical procedures. If all of these are separated from physicians, how will medicine, including radiology, advance or even maintain its present position? X-ray technicians must be trained by physicians. Who will train them when the specialty of radiology no longer exists? This whole proposal of artificial division is a retrograde step.

Everyone agrees that the hospital should have a great interest in its equipment, in its space, and in its personnel, but here the interest ceases. They can charge for the materials, interest on investment, salaries, and rental but not for the production of roentgenograms. If the hospital is able to hold out as a part of the bait for its insurance policy only the strictly hospital portion of the X-ray examination and if the patient has to pay the recognized roentgenologist for the rest, the bait will not be big enough. There seem to be better ways of protecting the hospital's interest than the division of the medical X-ray examination into two artificial portions. One of these is the maintenance of the quality and soundness of the medical care practiced in the hospital; the other is the recognition of the rights of the medical profession, who in the final analysis actually make the hospital what it is . . . a living institution for the care of the sick in the hospital.—Prepared by the Executive Committee of the Pacific Roentgen Club. Vol. 29, No. 6, December, 1937.

The origin and evolution of gall bladder infection must be exhaustively investigated. The biliary tract, both before and after surgery, is a medical problem since the liver, the pancreas, the bowel, heart muscle or the joints cannot be surgically removed. Progress will only come when the medical profession as a whole realizes the prevalence and seriousness of this affection and institutes measures which control the individual, not only from the standpoint of individual needs, but as an equally important factor, the general dietetic and hygienic procedures which we know to be associated in the management of this condition.—Charles T. Chamberlain, M.D., Ft. Smith, Ark.; The Jr. Ark. Med. Soc., Vol. XXXIV, No. 7, Dec., 1937.

THE MODERN PROBLEM OF NEPHRITIS; A CLINICAL RESUME

By PHILIP T. KNIES, M.D., Columbus, Ohio

"ATTENTION has been called to the importance of examining the urine, especially for albumin, before subjecting a patient to general anesthetic; and one practitioner, —will be found, recommending this practice in all cases. The method would create almost a revolution in surgery, and would not probably be considered as practicable; but it is a valuable suggestion and one that should be turned to account in all cases of subjects of middle or advanced years, whose appearance suggests the presence of renal disease."[1]

The startling contrast between the above quotation, daring for 1893, and current practice needs no emphasis. So thoroughly has the value of estimation of renal function become fixed in the minds of physicians today that a tremendous literature concerning the subject has arisen. Nephritis has, meanwhile,[2] come to be considered a systemic disease, of which the renal picture forms but a part. It is probably this concept, as much as any factor, which has permitted many theoretical and practical advances in the subject.

Classifications of nephritis are legion, but few can surpass in helpfulness to the clinician the one suggested by Christian[3] which forms the groundwork for the present analysis.

1. Acute and subacute nephritis.
   a. With renal edema (nephrosis syndrome).
   b. Hemorrhagic nephritis.
2. Chronic nephritis.
   a. With renal edema.
   b. Without renal edema.
3. Essential hypertension progressing into chronic nephirtis.
4. Renal arteriosclerosis progressing into chronic nephritis.

In this connection should be mentioned also the classification of Addis[55] which enjoys wide favor and has as a virtue the almost single criterion of urinary sediment examination.

ETIOLOGY

Nephritis is usually assumed to be the result of infection or metabolic dysfunction[4, 37]. Such infection apparently is predominantly streptococcic in type, but it is interesting in this connection that nephritis has been shown to be uniformly distributed throughout the United States, while scarlet and acute rheumatic fevers, also presumably of streptococcic etiology, diminish from the north to the south[5, 6]. This is suggestive of some at least modifying factor in the etiology of nephritis other than infection. It is further significant that sore throat, tonsillitis, and the common cold are found more frequently preceding nephritis than is scarlet fever[3, 7]. Exposure would appear to be a primary etiologic agent principally in cases associated with thermal allergy; in other instances it is probably operative through induced infection.

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The pathogenesis of hypertension in nephritis remains obscure, but since it has been shown that the production of hypertension by experimental renal ischemia is unaffected by preliminary denervation of the kidney, a neurogenic factor would not appear to operate[8, 9, 61].

Such observations, and several excellent laboratory experiments with animals suggest a possible humoral role of specific tissue toxins, and of anaphylactic reactions in the genesis of nephritis and its accompanying vascular phenomena [13, 62, 63, 64].

The causal relationship of essential hypertension to nephritis of Christian's class III above remains unsettled. Also uncertain is the pathogenesis of cardiac enlargement in nephritis. While hypertension may be the principal cause of such enlargement, it has frequently been pointed out that long standing and extreme hyperpiesia may be found with normal sized or only slightly enlarged hearts[3]. Some investigators[10, 63] believe that toxic products of renal degeneration may influence hypertension and cardiac enlargement. If this be so, the common concept of vascular primacy in the pathogenesis of nephritis may have to be changed to that of the tubular lesion, with secondary arterial, capillary, and cardiac changes.

The nephritis of pregnancy has usually been classed[57] as a degenerative tubular lesion, but others[6] insist that it is nephro-sclerotic, that is, vascular in origin, rather than nephrotic. That changes in the formed elements as determined by the Addis count of urinary sediment occur even in apparently uncomplicated pregnancy, associated with a depression of urea clearance value, has been shown[53]. Renal changes due to heavy metallic poisons[6], including gold and mercury as

well as lead, are generally considered nephrotic. The first two metals have been of increasing importance because of more general use in therapy. Attention has been called also to acute mercurial nephrosis by the introduction within the last three years of sodium formaldehyde sulphoxylate for its treatment. This antidote may be administered orally, intravenously, or rectally[6].

The pathogenesis of nephrosis, either as a primary entity or as the nephrotic syndrome of certain phases of hemorrhagic nephritis (see classification above), has been the subject of much discussion. It is generally assumed to result from a marked proteinuria caused possibly by the faulty synthesis of proteins within the body[4, 11, 12, 13, 47, 48, 49, 56, 62], since the proteinemia does not appear entirely explicable on the grounds of mere loss of normal serum protein. This concept is not universally accepted, however[14]. The accentuation of nephrosis by the increased catabolism of protein due to intercurrent infection, or to malnutrition, whether from anorexia or a low protein diet, has been recognized. Some investigators[15] find less evidence for the belief that reduction of plasma protein results in edema than that excessive salt and fluid intake are chiefly responsible. That other factors than plasma protein concentration are important in affecting plasma osmotic pressure has been pointed out [56], as well as the fact that such osmotic pressure is not always even parallel to the plasma protein concentration. The role of the Donnan effect in human blood serum at pH 7.4 has been shown to be about 20 per cent as large as the gross colloidal osmotic pressure. It may therefore constitute a factor of great importance in the determination of osmotic pressure, and therefore of edema, quite apart from simple protein concentration.

The concept of the etiologic relationship of nephritis and gout, postulated with finality in the 1893 publication quoted above[1], fell later into disrepute. However, the incidence of vascular disease, including hypertension and nephritis, has recently been shown statistically[16] to occur in much higher percentage in gouty individuals than in normal persons or those with other chronic illnesses.

While malignant and benign hypertensions may differ only quantitatively, the one from the other[17], many[18] consider them distinct clinical and pathological entities. Thus malignant hypertension is characterized by more inflammatory changes in capillary intima, and by more marked renal necrosis and hemorrhage than is the case in the milder essential hypertensive disease. Indeed differential diagnosis is not so difficult between benign hypertension and malignant hypertension as it is between the latter and the hypertension of late chronic nephritis without renal edema (2 b in the classification above).

Particular forms of hypertension are also recognized in plumbism, in the toxemias of pregnancy, in certain endocrine disturbances, polycystic kidney disease, and certain vascular anamolies[58]. The mechanisms of its genesis in such instances is not always known, but toxic injury to the intima of renal vessels is probably involved in some instances by the production of localized isthemia, resulting in intercapillary clotting, fibrosis, and the ultimate destruction of the nephron[18]. The interesting theory of pathogenesis of nephritis on the basis of variation of glomerular pressure and glomerular filtrate volume in relationship to tubular reabsorption of water and salt has been advanced[2]. Thus edema is assumed to result from low filtration values and high reabsorption of water and salt, and uremia to the opposite relationship. This concept appears to be deficient in emphasizing an almost totally renal origin of nephritis, in contrast to the systemic nature of the disease which is now widely accepted. A mere differential between filtration and reabsorption of salt and water would fail also to explain proteinuria, as found in both edematous and uremic phases of nephritis.

DIAGNOSIS

Albuminuria is, of course, the outstanding evidence for nephritis and is stated to be its most constant sign[7]. Many causes of albuminuria have been described, nine being listed in the monograph on nephritis mentioned at the beginning of this paper[1]. Included here also should be albuminuria due to prostatorrhea, an instance of which was recently encountered when a patient was refused insurance until shown to be consistently albumin free following prostatic massage.

Febrile albuminuria is more difficult of diagnosis, the line between it and true nephritis appearing at times to be quite arbitrary. In nephritis the albuminuria is characteristically persistent beyond the duration of the fever, and in fact is usually not noticed until the subsidence of the primary disease. According to Christian[3] only renal injury which is progressive should be termed nephritis. It is important to note, however, that the severity of the initial phase does not foretell the ultimate outcome, and only repeated observation can differentiate the albuminuria of "fever" from that of "nephritis". Red blood cells and casts are characteristic of nephritis though somewhat less constant in occurrence than albumin[19]. Some, however[22], believe that even these are not pathognomonic except as they persist. In evaluating such urinary findings the discovery of a recent illness possibly causative of nephritis is additional evidence that one is dealing with nephritis[4]. The employment of the Addis differential count of the urinary sediment, though complicated, has afforded the most critical evaluation of such findings[54], It should also be remarked that for careful examination urine should be both

concentrated and acid, dilution and alkalinity tending to obscure the findings. The examination of the night urine is preferable because the excretion of formed elements is most constant during this period[16]. This precaution is not indispensible, however, and the advisability of early examination may in practice make a recently voided specimen preferable.

The urinary syndrome may be the only feature of an early nephritis[21], but often remains unrecognized. Earlier discovery might make for more effective therapy of nephritis. The red blood cell cast apparently distinguishes nephritis from other causes of hematuria when it is found[7]. The large amount of protein precipitated by acetic acid in the cold in orthostatic albuminuria is very characteristic[4] being said to occur otherwise only in diabetes.

The concentration test is generally granted to be the most sensitive index of kidney damage and is easily determined, but apparently is of value in demonstrating the qualitative presence of nephritis rather than its quantitative impairment of renal function[19]. The function of dilution, less commonly tested, has probably the same significance. The retention of nitrogenous products is indicative only of advanced nephritis, either acute or chronic, and hence is of little clinical diagnostic value early in the disease. Causes of high blood nitrogen levels exist, however, other than nephritis, including dehydration as in vomiting, sweating, diarrhea, and thirst; metabolic disturbances, such as Addison's disease; the oliguria of reflex or toxic anuria and passive congestion. Exclusion of such factors must be made before nephritic retention can be proved[23]. Probably the most dependable index of the degree of kidney sufficiency and the best measure of the percentage of functioning nephrons is the urea clearance test of VanSlyke[19, 24]. It may be pointed out that with decreasing clearance values a nephritic edema usually subsides below a value of 20 per cent, and that retention begins at that point. This is confirmatory of a long standing impression that edema and nitrogen retention are mutually exclusive. Uremia becomes imminent at 5 per cent clearance value. It has been shown that this test is dependable in children as well as in adults.[52]

The urea ratio of Mosenthal[24] (100 x BUN) (VanSlyke gastrometric urease method) NPN, (Folin-Wu method) is possibly less satisfactory than the urea clearance determination, but much simpler to do since no urine specimen and only one of blood must be examined. A normal value of this test is 44 or less. As might be expected, low values are obtained in instances of hepatic insufficiency as a result of suppressed urea formation.

The elevation of blood cholesterol is frequently sought in suspected nephrosis. In this connection it may be pointed out that blood urea nitrogen and cholesterol vary inversely, as a result, probably, of osmotic pressure relationships.

The recognition of true nephrosis[4] is dependent also upon other factors than albuminuria unassociated with hypertension, retention, or abnormal formed elements in the urine. The difference in age incidence, the absence of a factor usually etiologic to nephritis, and the absence of changes in the ocular findi are important considerations.

The importance of retinal lesions[26, 27] in the diagnosis of nephritis is well recognized. That they are common in glomerulo-nephritis, but are not characteristic of this entity in distinction to any other cause of hypertension is pointed out[26]. Thus they are apparently dependent on hypertension, rather than toxemia.

The incidence of such changes is noteworthy[27]. Thus vascular changes alone are found to occur in 12 per cent of patients with acute glomerulonephritis, and retinal edema in 3 per cent, at an average of 36 years. Vascular changes are found in 86 per cent of cases of chronic glomerulonephritis and retinopathy in 5 per cent, at an average of 44 years. Vessel changes occur in 92 per cent of patients with essential hypertension and retinopathy in 40 per cent at an average age of 53 years. Distinction is possible, apparently, only between hypertensive and degenerative or arteriosclerotic changes by ophthalmoscopy.

The differential diagnosis of uremia and hypertensive encephalopathy, the latter formerly termed convulsive uremia, is no longer difficult as a result of definition. Thus uremia may include only cases of nitrogen retention, the exudative and vascular changes of the cerebrum secondary to hypertension being included in a separate concept. This differentiation has made for greater simplification of the concept of uremia, and especially its therapy.

Anemia[28] is a common feature of nephritis, and parallels in its severity the degree of renal impairment and the time of its existence. Thus if renal insufficiency is present without anemia, the impairment may be assumed to be recent; while an anemia in a patient with nephritis, but with good kidney function is probably due to some other cause. The anemia apparently is accentuated or may be caused entirely by the toxic effect of retained nitrogenous products, possibly creatinine, on the bone marrow. Cachexia, following either limitation of food protein or loss of protein in the urine also accentuates anemia. It is important in connection with estimating the duration of nephritis that a systolic blood pressure of more than 180 mm. Hg., enlargement of the heart, or arteriosclerosis usually reflect chronicity, and suggest that an apparently acute

episode is probably an exacerbation of a chronic nephritis[3].

PROGNOSIS

Several factors are useful in forecasting the outcome of nephritis. Persistence of abnormal urinary findings, particularly red blood cells, is of grave significance[19]. It has been shown that 90 per cent of cases of acute glomerulo-nephritis will survive the acute phase[7]; 80 per cent of these survivors are found "cured" after seven or eight years; the other 20 per cent developed chronic nephritis. Of the "cured" cases 50 per cent will have become albumin-free within six months after the initial attack; 20 per cent more at the end of 12 months and another 10 per cent some time thereafter. Cases of "cure" have been shown to occur as late as five years. Of those cases developing a chronic progressive nephritis, 80 per cent had shown albuminuria at the end of the first year, the remaining number probably being accounted for by recurrences of the acute nephritis with later development of chronicity. Generally speaking if albumin persists for one year or longer the chances of a continuously progressive chronic nephritis are six to one. There is no method of certainly predicting healing or chronicity in a given case[21]; only repeated observation can show this.

A diastolic blood pressure which remains over 90 mm. of Hg. after the acute phase of nephritis has subsided is usually indicative of rapidly progressive and persistent high blood pressure[21]. A persistent and progressive anemia is significant of an active nephritis[21, 28]. Generally the remote prognosis is more favorable in hemorrhagic nephritis in children than in adults[7].

The urea clearance test is the outstanding laboratory procedure in prognosis[21], giving a dependable index of the functioning renal tissue, in absence of damage to tubular cells by temporary toxic factors as in pneumonia or pyelonephritis when the percentage may be reduced temporarily despite normal glomeruli. The concentration tests are apparently of less prognostic value, being more indicative of qualitative than quantitative renal impairment in nephritis.

The occurrence of retinopathy suggests a poor prognosis in nephritis[26, 27], the average length of life after the appearance of advanced forms being but six months.

In the nephritis of pregnancy, 10 to 15 per cent of cases will progress at once to a chronic phase[6], this being the basis for the insistence upon induced labor early in the first toxemia. Forty to fifty per cent of patients will show recurrence of nephritis with subsequent pregnancies, possibly as exacerbation of latent nephritis. Thus only 35 to 50 per cent of cases of nephritis during pregnancy will eventuate in recovery after multiple pregnancies. This percentage it is to be noted is less than half as favorable as that of glomerulonephritis from other causes.

In essential hypertension with nephritis less than one-third of patients will die of uremia[13]. Even if renal insufficiency occurs, which is less likely in this than in primary nephritis, death is more likely to be of cardiac or cerebral cause than nephritic.

The outlook in renal disease is apparently good only in true nephrosis[4], barring complicating infections and malnutrition; and considering the disputed existence of this entity, such hope is of little importance. In some cases of nephritis of poor prognosis a derived kidney protein has been shown to occur in the urine in addition to plasma protein[39].

TREAMENT

The treatment of nephritis is generally admitted[29] to be ineffective either as a cure or as a check upon progress toward more chronic phases of the disease. Even prevention through the treatment of acute infections is almost equally unsatisfactory[21]. Earlier and more intensive management of apparently uncomplicated mild infections must be undertaken[30] before a sense of defeatism in regard to treatment can be overcome.

Treatment of nephritis has been almost synonymous with diet and the importance of this topic merits first consideration. Diet in nephritis at present aims mainly at the control of malnutrition and thereafter of edema and possibly nitrogen retention. Nutrition is of great importance, for the vital structures including heart, liver, and kidney have been shown[47, 48] to be early depleted of protein reserves, rather than being spared as commonly thought. Time honored practice prescribes a lacto-vegetarian diet of extremest degree[2, 31]. Later investigations have shown actually a lesser incidence of nephritis in scarlet fever when treated by a liberal diet than by a lacto-vegetarian one[22]. Experimentally, however, in rats it has been shown recently that the severity and course of nephritis resulting from a single toxic insult to the kidneys is markedly influenced by diet[59].

It may be that a major effect in this connection may be exerted by the qualitative rather than the quantitative aspect of the proteins ingested. A liberal protein diet, however, is at present generally accepted as beneficial in all nephritis except that with actual retention of nitrogenous waste products. Conversely a low protein diet may accentuate the anemia and malnutrition of nephritis[32], and if persisted in, may be productive of more harm than benefit. High protein intake was first popularized by Epstein in the treatment of nephrotic syndromes with an apparent benefit that demanded its extension to other forms of nephritis. The resulting increased albuminuria has been shown[11] to be due to in-

creased renal blood flow and the diuretic action of high protein intake rather than upon increased renal damage. Such high intake, however, is not a satisfactory means and there apparently has been none yet discovered of increasing the concentration of serum protein of the chronic nephrotic syndrome to any marked extent.

By the plasmaphoresis experiments on dogs with the production of hypoprotemia and the feeding of large amounts of selected protein there have been demonstrated hitherto unsuspected depots of protein storage in the body[47, 48] containing two to three times the amount of normal circulating protein and estimated at 500 grams in the average adult. Such deposits may be increased on a high protein intake but circulating protein is difficultly elevated[47]. Despite these unsatisfactory results of the administration of unselected protein, it has been suggested that more satisfactory results might be obtained with the ingestion of selected proteins[50, 51]. Such storage of protein is further assisted by the administration of amounts of carbohydrates and fat sufficiently large to minimize protein catabolism. Stored protein obviously makes no demand on excretory mechanisms, and hence cannot be considered to increase kidney load[6]. The fact that circulating protein is little increased despite depot storage is suggestive that the hypoproteinemia is dependent on metabolic and synthetic factors in addition to proteinuria[4, 11, 12, 13].

Diets advocated in nephritis without retention and in nephrosis[29] include as high as 1.5 grams of protein per kilo body weight per day with a total intake of 90 to 120 grams and 2,500 to 3,000 calories daily. The extension of an adequate diet to all stages of latent and chronic nephritis is generally sanctioned in amounts of .6 to 1 gram of protein per kilo per day or 60 to 100 grams in all[21, 29, 31]. It has been shown that kidney function is unharmed, the clinical course unaltered, and spontaneous improvement not endangered by such diets. Severe protein restriction apparently is of value mainly in uremia where minimum intake may retard a fatal issue[3]; at this stage reduction of nitrogen retention may follow restriction of protein intake and minimizing of protein catabolism[4]. Some workers[15] combine with physical rest the Karrell diet of 800 grams of milk daily followed in two or three days by a protein intake of 40 grams daily and high carbohydrate and caloric diets.

Even in acute nephritis the avoidance of such restrictions and the administration of an adequate intake is advised by some[13], though here again there is disagreement[31], others advocating strenuous restrictions in protein, caloric, fluid, and salt intake, and even a starvation period with the taking of protein only after blood pressure has returned to normal and fluids only after edema has disappeared. In hypertension and arteriosclerosis adequate nutrition should even more carefully be maintained by avoidance of protein restriction[19, 29]. Obesity and diabetes, when complicating nephritis, are probably the main indications for selective diet. Certainly no dietary treatment is necessary for albuminuria of mild essential hypertension[33] or of fever.

Secondary in interest only to protein is fluid intake, restriction of which has long been advised in acute nephritis pending the subsidence of edema[31]. Newer opinion believes restriction of fluid to be useless in renal edema in any stage of nephritis, pointing out that death from edema probably seldom occurs[21]. Some[13, 19] advise restriction of water intake to the output of the previous day. All are agreed that in the face of retention of nitrogen all water restriction must be disregarded despite edema[13].

The question of administration of salt completes the trilogy of moot points in the therapy of nephritis. Many recommend its restriction particularly in the edematous stages of both acute and chronic nephritis[13, 19], but others advocate unrestricted intake[32]. Despite the fact that retention of fluids parallels retention of the sodium ion, some investigators[34] have had little success with administration of potassium salts favoring the elimination of either sodium or edema fluid. Even those advocating salt restriction frankly admit the ineffectiveness of this measure alone to control edema[13]. In late nephritis and in forms without edema salt restriction is seldom advocated.

Bed rest may be of great value, especially in acute nephritis and in the reduction of protein catabolism in nephritis without retention[13]. In the acute phase total bed rest is advised until red blood cells have been absent from the urine at least two weeks and its resumption is indicated by their recurrence upon activity until it becomes apparent[21] either that a chronic nephritis has occurred or that the presumed acute episode must have been an exacerbation of a chronic nephritis, and that further rest would be of little benefit. The sedimentation rate may be of value in determining the time for increased activity.

Many measures have been aimed at the elimination of edema. It must be recognized that these represent only symptomatic treatment and probably do not add to the ultimate better prognosis of the patient. Catharsis is acknowledged to be of slight value[13] and the danger of magnesium retention and of debilitation may be prohibitive. Counter irritation over the kidneys is probably worthless and may even be contraindicated in acute nephritis though occasionally advocated. It would not appear that reflex vasodilatation could be of advantage in this situation. Sweating is generally condemned, especially in cases with cardiac disease. It may be permis-

sible in nephrosis[35], some maintaining that blood flow through the kidneys is increased and that a beneficial alkalosis may be induced. Pilocarpine as a diaphoretic is generally condemned[13].

Diuretics are probably contra-indicated in all phases of nephritis excepting nephrosis or in edema of cardiac origin. Here the mercurial diuretics, glucose or urea in doses of 100 grams per day are of greatest benefit[13]. The intravenous injection of 15 per cent solutions of acacia may assist diuresis by altering osmotic pressure. The dose of one gram per kilo of normal body weight has been shown[36] to reduce edema slightly but transiently at the first administration. After repeated administrations, however, the liver becomes progressively enlarged and plasma protein reaches exceedingly low levels, apparently independent of the amount of acacia in the blood and returns very slowly to normal upon abandonment of this therapeutic measure. O'Hare believes that all such therapy is of very little benefit[13].

Thyroid substance is thought of advantage by some[4], but this is denied by others[13] as also is the use of acid ash and high potassium diets. Venesection, recommended in retention by some older authors and also in persistently elevated high blood pressure in acute nephritis[31] is generally thought to be of no benefit as are also transfusion and plasmphoresis. The administration of liver extract has not been found of value in promoting hepatic elimination[38].

In combating morning dizziness often experienced in nephritis, caffeine, sweets and aminophyllin or other vasodilators may be of value[13]. Sodium luminal in .02 gram subcutaneous doses is advocated for vomiting[33], and sodium bicarbonate or glucose by mouth or vein may be used for dyspnea due to acidosis. The release of all dietary restriction may occasionally permit a patient to retain food desired at the moment when all else is regurgitated. For pruritis in uremia dilute solutions of acetic acid in sponge water are stated to give relief. Physical relaxation, mild sedatives, and the avoidance of all immoderations including those of treatment are advised in cases of hypertension with nephritis[3].

In the anuria of acute nephritis the intravenous administration of glucose or hypertonic saline may be of value[31]. Decapsulation has been found ineffective by most authorities in acute anuria though it is recommended occasionally[60]. The avoidance of chilling and respiratory infections are advised by most authors, including a change to less rigorous climate if possible. The removal of foci of infection is desirable in acute nephritis but usually after convalescence unless it be very early in the disease[33].

The treatment of anemia is usually disappointing[21, 28], despite high protein diet, large doses of iron, and even transfusions. The treatment of cardiac decompensation complicating nephritis follows its own appropriate indications[30]. Surgery in the form of suprarenal denervation, and related operations, is not generally accepted in the therapy of hypertension. Renal denervation[9] has been shown not to affect renal efficiency and although blood pressure is lowered this also may not be permanent, but appears to rise slowly in experimental animals, reaching after several weeks the preoperative level.

Sedatives including morphine, chloral hydrate, phenobarbital and others in adequate dosages are advised in the treatment of hypertensive encephlopathy[13]. Lumbar puncture with reduction of cerebro-spinal fluid pressure to normal levels will usually control acute seizures, and magnesium sulphate in doses of 10 to 20 cc. of 10 to 20 per cent solution intravenously may be of great value.

CLINICAL IMPRESSIONS

Christian has pointed out that the classification used in discussing nephritis is not so important as that an adequate one be used. It is certain, however, that some are more amenable to clinical application than are others. From this standpoint the classifications of Christian and of Addis have each much to recommend them. In the opinion of the author, however, the fact that the former introduces other criteria than the objective urinary findings makes it conform more closely with modern concepts of the systemic, rather than the purely renal nature of nephritis. Furthermore the emphasis on edema thus introduced gives accent to a feature of the disease most important not only in diagnosis and therapy but also in theory and investigation. The specific inclusion and differentiation of essential hypertension as a group apart from hypertension secondary to chronic nephritis is another point of distinction important in its clinical applications.

The relationship of benign and malignant forms of essential hypertension is a point not yet definitely settled. It may be that criteria for their clear separation are insufficient, but from a clinical viewpoint it seems desirable to consider them separately. In view of the usually clear cut status of a case of hypertension in regard to these two groups it may help our thought to consider them separate despite the possibility of coalescence in the light of further knowledge.

Save in cases with outstanding objective findings such as early nephritic edema or hypertension, the urine analysis is undoubtedly the most important procedure in the discovery of nephritis. Furthermore it is the routine analysis as done in practice which requires most policing rather than the extensive and special examinations later applied. The necessity of a concentrated and acid specimen and of prompt examination has already been emphasized. Under hospital conditions at least, initial routine urines on female patients

should be catheterized; debatable findings may thus be avoided in many instances.

The mere technique of the usual procedures is easily neglected. An occasional immersion of the hydrometer in water will demonstrate its accuracy. The use of various indicators in determination of reaction of urine is permissible provided their end points be reasonably close to pH 7. The use of methyl red, with an end point of pH 5.5 as a routine indicator hardly seems advisable; its value in demonstrating therapeutically effective ranges of acidity in the use of certain urinary antiseptics is another matter. The interpretation of the reduction reaction, probably usually with Benedict's solution, calls for two precautions sometimes not observed. Reduction is at times slow, making imperative longer heating than a momentary boiling; the use of a water bath at sustained boiling temperature for five minutes is good in this connection. Secondly the interpretation of green discoloration should be deferred until the character of the precipitate can be determined; a suspicious change can be induced by insoluble products other than copper. The use of sulphosalicylic acid or other such reagents appears to be more accurate in excluding questionable protein reactions due to mucus than is the commonly used heat and acetic acid method.

In the estimation of renal reserve, the urea clearance test appears to give the most consistent results. It must be realized, however, that this is a procedure requiring several careful collections of specimens and determinations; considerable practical difficulty in this often renders the test less reliable. This, of course, is no fault of the test other than its complexity. The ability to concentrate is more easily determined and because of the greater accuracy thus possible under less ideal circumstances its determination may be preferable routinely. The author has abandoned a combined concentration and dilution routine, however, because of the difficulty in obtaining maximum dilution after a prolonged period of concentration, probably due to the retention of water by dehydrated tissues. Furthermore it is felt that the concentration period as often practiced from the time of the evening meal until the following morning is insufficient to call for maximum concentration. The performance of this test in cases with nitrogen retention may accentuate the latter to the disadvantage of the patient.

The interpretation of nitrogen retention in terms of nephritis is not warranted until the effects of dehydration and chronic passive congestion have been evaluated; this may constitute more than academic difficulty in a given patient. In this connection also it must be recognized that causes of hypertension may exist other than those listed in the nephritic classification[58]. In children especially coarctation must be suspected, and the absence of femoral pulsation is suggestive of this anomaly.

There is a great temptation to adopt an attitude of nihilism in therapy in nephritis, for certain it is that treatment as usually applied affords little apparent benefit. Undoubtedly a point for more concentrated attention is the care given possible etiologic infections. It may be advisable to adopt an attitude as radically conservative in regard to respiratory infections and other common etiological episodes, as is now universally given to acute rheumatic bouts in the prophylaxis of heart disease. Much education will be needed before adequate rest, avoidance of chilling, and the like can be obtained generally under these circumstances. Routine urine analysis in seemingly insignificant infectious episodes would lend weight to this advice. It is conceivable that such rest would be of importance in minimizing vascular damage from toxins regardless of source or mode of action. More general removal of focal infections is probably important. Though this appears desirable early, it must be granted that acute nephritis should be permitted maximum improvement first.

It appears reasonable that restriction of protein intake below the catabolic requirements of the given patient, averaging possibly .6 grams per kilo of body weight would be not only useless but also dangerous in accentuating malnutrition. That it may be well to restrict the intake to this level, however, is suggested by the work of Farr and Smadel referred to above[59]. In this as in probably all therapeutic efforts in nephritis it is wise to avoid extremes. Clarification of the concept of uremia suggests retention of protein as the ideal time for protein restriction, though here again starvation may be as dangerous as retention in either acute or chronic nephritis. The hopelessness of ultimate results in chronic nephritis would suggest avoidance of disagreeable measures. The recognition of retention of nitrogen on other than nephritic bases is important because of the imperative need of appropriate therapy.

The dietary regulation of the blood level of nonprotein nitrogenous products is often disappointing, prolonged extreme restriction being followed by minor or no improvement. In two cases of renal insufficiency recently observed in which there was increasing retention despite maximum restriction of protein intake, a more liberal protein allowance without alteration in caloric or fluid values of the diet was followed by dramatic diuresis and reduction of retention level. The value of protein and of urea as diuretic has previously been mentioned.

The management of plasma protein level by dietary intake has also been disappointing, though it is possible that the solution of this difficulty may lie in the work of Whipple and his asso-

ciates[51] in determination of the specific values of various proteins in regeneration of plasma protein.

The use of diaphoresis, catharsis, transfusion, or plasmaphoresis appears to be included in the theoretical possibilities too exhausting to be of practical value. Certainly this is the situation in chronic nephritis with retention where improvement will be no more than fleeting and that at the expense of much discomfort and inconvenience. There may yet be place in treatment of the acute episodes of nephritis with retention for such measures in an effort to delay a fatal issue until spontaneous improvement may render renal function again adequate. Even here a reasonable delay in use of these measures is rational in view of their debilitating influences.

CONCLUSIONS

1. A summary of selected current literature relating to the classification, diagnosis, prognosis, and treatment of nephritis is presented and discussed in relation to observations in a University Clinic.

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MOLDS AS A CAUSE OF ALLERGY

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THE study of fungi in allergy is receiving increasing attention in the last few years. The purpose of this paper, in reporting 12 cases of respiratory allergy due to air-borne molds is to emphasize the relative frequency with which mold allergy can be observed in a relatively small practice.

The earlier literature relative to fungus allergy has been frequently reviewed, and consists of the then rare case reports of Van Leeuwen[1] of Holland in 1924, and Cadham's[2] report of asthma due to rusts also in 1924. Further case reports appeared in 1930 by Hopkins[3] and Bernton.[4] Cobe[5] reported a case of asthma due to a mold in 1932. It was not until 1935 that Feinberg[6] emphasized the frequent incidence of mold reactions in respiratory allergy when he reported 54 cases of seasonal hay fever and asthma due to molds, and concluded that molds were second in importance only to pollens.

Other workers, notably G. T. Brown,[7] Conant, Wagner and Rackemann,[8] and Cohen[9] and associates, attempting to culture molds from various household objects and to correlate their findings and reactions with their patients' clinical allergy, had inconsistent or negative results.

It appears that these non-pathogenic molds probably take origin in growth on vegetable matter and from the various grains and from the soil rather than from household objects. While present in the air the year round, they are apparently present only in sufficient quantities from May to November to produce symptoms in most susceptible persons. Durham[10] recently made spore counts in ten large cities and made several interesting observations relative to mold spore incidence. Less spores are observed on rainy days. Alternaria spore production is greatest from May to November—with a peak in July and August—greatest in moist weather, and after a rain, discontinuing within a week after a rain, if the temperature is high. Spores, like pollens are distributed by convection currents and strong lateral winds. It was further noted that a good pollen year is often a poor spore year, and vice versa. Contrary to what one might expect, Durham found alternaria spores most prevalent in the dry midwestern wheat plains; found a high alternaria count around the entire Great Lakes area; and a very low incidence on the east and west coasts.

Considerable resistance has been experienced to the acceptance of fungus spores as an etiological factor in allergic diseases. It is possible that the low counts found by Durham along the east and the west coasts may explain some of the variable results in those parts of the country.

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CLINICAL OBSERVATIONS ON MOLD ALLERGY

The history of mold sensitive cases is often so typical that in a large percentage of the cases the results of skin tests can be anticipated. The complaint is often of hay fever or asthma or of both, beginning early in the summer, gradually increasing in intensity—with no free interval in July or the early part of August. In fact July and August often find these patients at their worst. Relief does not come until long after the frost. Moreover, these patients are often observed to have bad days when the pollen count is low. For example, a thirteen-year old girl, whose mother had typical ragweed hay fever, volunteered the story that the onset of her hay fever and asthma usually preceded her mother's by a month. She also pointed out that she and her mother were rarely bad on the same days, the mother being worse on sunny days, and the daughter more apt to be bad on dull damp days. The daughter gave a strong reaction to alternaria and an indefinite reaction to ragweed.

In mold sensitive cases, moreover, previous pollen treatment in some cases gave disappointing results. A further hint of fungus sensitivity is a history of intolerance to mushrooms or yeast containing foods.

Youth appears to be a factor in these cases. Of 12 cases observed, four were under 10 years of age; five between 11 and 20; three were between 20 and 30.

Tests were made by scratch and intracutaneous methods for yeast, alternaria, aspergillus fumigatus, aspergillus hortei, chaetomium, hormodendrum, fusaria, monilia sitophilia, mucor, penicillium, and trichoderma. For the most part, reactions were obtainable by either scratch testing with powdered molds or by testing intradermally with a 1/1000 dilution, although in several typical cases, scratch reactions were unobtainable. Of the 12 cases, 11 reacted strongly to alternaria; nine reacted to aspergillus fumigatus; and six re-

acted to yeast. These cases comprise only those with strong positive skin tests consistent with typical mold histories.

In a number of cases of simple ragweed hay fever with no symptoms suggestive of mold allergy, occasional positive reactions to alternaria and aspergillus on intradermal testing were obtained. These reactions were usually milder in character, i.e., usually slight, though occasionally moderate, and were negative to the scratch test.

Eleven of these 12 cases were of the seasonal type described by Feinberg;[11] with principal complaint from May until after the frost or with marked exacerbations in the pollen free period late in July and early in August. It is interesting to examine the pollen reactions in these summer cases.

In five seasonal cases the reactions to pollens were absent or so minimal that it required a 1/1000 solution intradermally to produce a slight reaction. In these cases pollen reactions appear to be inadequate to explain the symptoms. (See Table I.)

In six additional cases symptoms were also seasonal. (See tables II and III.), but strong reactions to the pollens as well as to the molds were obtained. It is interesting that symptoms in four of these cases usually persisted after the frost until November or December. It is in such cases where strong reactions are obtainable to pollens as well as to molds, that the evaluation of molds from a diagnostic standpoint provokes most questions and doubts. It is here that the history of symptoms in late July and early August period or of symptoms after the frost is of diagnostic aid.

The remaining case is a case of nonseasonal asthma who reacted only to aspergillus fumigatus, both on scratch testing and intradermal testing. No other reactions were obtainable with foods, inhalants, or pollens. The results of treatment were not satisfactory however.

TREATMENT

Of nine seasonal mold cases who were treated with mold extracts, eight received 75 per cent relief or better. One obtained 50 per cent relief. One patient with perennial nonseasonal asthma, treated with aspergillus fumigatus, had no lasting relief. In most of the cases it was found necessary to combine the mold therapy with usual pollen treatment; for that reason evaluation of the benefit of mold therapy is difficult despite its apparent effectiveness.

CASE REPORTS

Case No. 1.—Alvin R., age 22, had hay fever of two years duration when first seen on April 28, 1936. His symptoms had occurred chiefly during the month of July, and to a lesser extent in August. Ragwood 1/1000 intradermally produced only a slight reaction. The grasses were negative. He gave a three plus immediate and delayed reaction intracutaneously to alternaria. All other molds were negative. He was treated pre-seasonally with alternaria and ragweed with 100 per cent results for two years.

Case No. 3.—Allen I., age 10, has had hay fever from June to October for three years, and slight hay fever perennially. His symptoms were marked in July and in the early part of August. He reacts moderately to ragweed and gives a plus minus to other pollens. Alternaria produced a strong reaction, but to yeast, aspergillus fumigatus, fusarium, and monilia by scratch and intradermal testing he gave a moderate reaction. Co-seasonal treatment was begun on August 19 of this year with alternaria and ragweed with very gratifying results.

Case No. 6.—Eugene S., age 19, a farmer. This boy has had hay fever for five years, first noticed while threshing five years ago. Since then his symptoms have been present the year round to a very slight degree, getting worse in May, and continuing in aggravated form after the frost until November or December after which the condition becomes quiescent. The worst time of the year, however, is July and August coincident with the threshing season. He is greatly distressed by all the grain dusts and straw dust, and has especially noticed that moldy or smutty grains cause him more distress than clean grains. It required a 1:1000 dilution of grasses and ragweed to produce a moderate intradermal reaction, weaker dilutions giving no reactions. Tests for all animal danders common to the farm were negative. He reacted to most of the common air borne molds by the scratch or intradermal tests. These were:

Alternaria	3 plus
Aspergillus Fum.	4 plus
Chaetomium	2 plus
Fusarium	2 plus
Hormodendrum	2 plus
Monilia Sit.	2 plus

Because of his trouble around the grains he was tested for smuts as well, and reacted to Corn Smut—3 plus; oat smut—2 plus; and wheat smut —2 plus. He was treated pre-seasonally with pollens and a mixture of molds with 75 per cent results.

Case No. 7.—Charles W., age 17, typifies all that is complex and controversial about mold allergy. He is a good pollen reactor and an equally good mold reactor. For the past five years he has had hay fever beginning around the end of May getting worse throughout July, August and September, and "beginning to improve" after the frost. He has noticed that he is bothered by oat and wheat dust and corn fodder as well, and these grain dusts often cause him to wheeze. Reactions to all animal dander were negative. He reacted strongly to the grasses, plantain and to ragweed. He gave a 3 plus reaction to yeast and to alternaria, and slight reactions to aspergillus fumigatus, fusarium and penicillium, as well as moderate reactions to oat covered smut, corn, and wheat smut. Treatment was started on July 17 of this year with ragweed extract and mixed mold extract with over 75 per cent results. Avoidance of exposure to grain dusts appears to have been a contributing aid.

Case No. 8.—H. V., age 8 years, had bad asthma for three years, from June to November, the onset occurring in June, 1933, a few days after a tonsillectomy. She gave strong reactions to the grasses and rag weed, and to alternaria and

TABLE I. Reactions obtained in five cases of seasonal Hay Fever or Asthma, in which pollen reactions failed to explain symptoms adequately. All reacted strongly to one or more molds.

CASE	SEASON	Grass	Plantain	Ragweed 1:1000	Yeast	Alternaria	Aspergillus F.
1. A. R.	Hay fever from July to September.	0	0	±	0	+++	0
2. P. B.	Hay fever and Asthma May to Sept. esp. in July.	±	0	±	0	+++	+
3. A. I.	Hay fever from June to Sept., esp. in July.	0	0	++++	++	++++	++
4. T. B.	Hay fever from July to Dec. Asthma in July and August.	0	0	+	0	+++	0
5. F. W.	Hay fever from May to Oct. esp. July and August.	0	0	++++	0	++	0

TABLE II. Three cases of seasonal Hay Fever or Asthma persisting well beyond the frost and reacting strongly to many molds, as well as the usual pollens. Result of treatment with molds and pollens was good in all three cases.

CASE	SEASON	Grass	Plantain	Ragweed	Yeast	Alternaria	Aspergillus F.
6. E. S.	Hay fever from May to Dec. and perennially. Worst period in July and August.	+++	0	+++	++	+++	++++
7. C. W.	Hay fever from May to Nov. Worst period in July and Aug.	+++	++	+++	+++	+++	+
8. H. V.	Asthma from June to November.	++	0	++++	++	+++	++

TABLE III. Three "typical pollen cases" with added reactions to molds. Importance of molds difficult to evaluate in this type of case in absence of typical mold history.

CASE	SEASON	Grass	Plantain	Ragweed	Yeast	Alternaria	Aspergillus F.
9. T. G.	Hay fever from May to October and perennial.	++	0	++++	0	++	++
10. D. A.	Hay fever from June to Oct., esp. August and Sept.	++++	+++	++++	+	++	++++
11. H. M.	Hay fever from August until after the frost and perennially.	++	++	++++	0	++	+++

aspergillus fumigatus. Preseasonal treatment begun June 1, 1936, with pollens and alternaria and aspergillus gave excellent results.

Case No. 9.—T. G., age 10 years, was first seen on April 22, 1936. She has had hay fever for three years, chiefly in the summer from early Spring to frost, but also perennially. She reacts strongly to grasses and ragweed as well as to alternaria and aspergillus. She was treated for two seasons beginning April, 1936, with pollens and molds with 90 per cent results both years.

Case No. 12.—B. F., age 23, was referred to me on October 24, 1936. She had had perennial asthma since 1931, perhaps a trifle worse during June or July, but present throughout the year. Family history was unknown and past history was irrelevant except for submucous resection performed in September, 1935. On physical examination she was found to be very greatly retarded mentally, and marked emaciation was apparent. She had a marked speech defect and mentally was of pre-school age. Physically she appeared malnourished, had poor tissue turgor, and weighed only 82 pounds. There was a marked degree of emphysema, and the usual findings of asthma were present.

Skin tests for the usual foods, inhalants, and pollens were all negative by scratch and intradermal methods. Ocular tests for pollens were also negative. She gave positive reactions to aspergillus fumigatus on scratch tests and intradermal tests. All other molds were repeatedly negative. She was treated with an extract of aspergillus fumigatus for five months. Results were poor.

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THE ALEXANDER-GOLDSPOHN OPERATION AND ITS MODIFICATION FOR RETRODISPLACEMENT OF THE UTERUS

By H. M. WILEY, M.D., CINCINNATI, OHIO

IN 1884, Alexander and Adams[1] described a method for the extraperitoneal shortening of the round ligaments by the inguinal route. The technic consisted of an incision down to the external ring, pulling the ligament out as far as it would come and then suturing the cut proximal end of the ligament to the pillars of the external ring. The indications were limited to replaceable, uncomplicated retrodisplacement of the uterus.

In 1897, Goldspohn described his technic of opening the peritoneum through the canal of Nuck, which permitted palpation of the pelvic organs and offered a method of determining the degree of anteversion while the ligaments are being shortened. Skene Keith,[3] R. Peterson,[4] Hirst,[5] Broun,[6] and Ladin & Smigel,[7] have contributed to the technic and argument for the operation. Thoma[8] has recently reported the results of some 200 cases, with a 1 per cent anatomical failure and one hernia in the group. My results with the operation have been very gratifying—without anatomical failure or hernia.

TECHNIC OF THE ALEXANDER-GOLDSPOHN OPERATION

After needed curettage, repair of the cervix or the pelvic diaphragm, two inguinal incisions (Fig. 1) are made about 5-7 cm. long, extending from the spine of the pubis towards the anterior superior spine, 2 cm. above Poupart's ligament. The incision is carried down through skin, fat and superficial fascia. The spine of the pubis is again felt and used continually as a landmark. The external ring can be felt a little above and laterally. A retractor is placed in the pubic end of the wound. The intercolumnar fibers are then incised and the external ring and aponeurosis of the external oblique are cleansed of areolar tissue. After the intercolumnar fibers are incised, some of the contents of the inguinal canal, consisting of fat and the fibers of the round ligament, protrude out through the external ring. This mass of tissue is caught with a clamp and slight traction is made. A grooved director is then inserted between the pillars of the external ring and up through the canal to the internal ring. The fibers of the aponeurosis of the external oblique are then split upward about 1¼ inches. (Fig. 2). The edges of the cut aponeurosis are caught with hemostats and retracted laterally.

Read before the Cincinnati Obstetrical Society, April 15, 1937.

The Author

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The ilio-inguinal nerve is seen lying just beneath the aponeurosis of the external oblique, close to the round ligament and readily visable during the operation. The genital branch of the genito-crural nerve enters the inguinal canal on the posteromedial aspect of the round ligament and accompanies the ligament as it emerges from the external ring to its insertion in the labia majora. Skene Keith and Hugo Sellheim insisted that these nerves should be cut to prevent postoperative pain. Edmund Andrews has clearly demonstrated by means of electrical stimulation of both segments of the divided nerve in the human, that all the motor fibers to the internal oblique muscle are given off before the nerve enters the inguinal canal; hence, section of this nerve will not cause paralysis and atrophy of this muscle. Injury or inclusion in sutures will cause pain in the inguinal region and upper part of the thigh.

Using the spine of the pubis as a landmark, the round ligament is now isolated. Finding the round ligament is, of course, the pivotal part of the operation. The ligament divides into strands at its distal end and these strands must not be mistaken for the compact proximal portion sought for. The proximal part will be found lying to the edge and just underneath the internal oblique muscle. With a tissue forceps, seize a small amount of this tissue and turn it over. The white compact portion of the round ligament will at once appear. With continued pull on the ligament the cone of peritoneum enclosing it becomes visable. This cone is opened. (Fig. 3) and the peritoneum is stripped back toward the uterine end of the ligament. The finger is inserted into the abdominal cavity and the status of the uterus and adnexa determined. After the proper amount of anteversion is obtained, the redundant distal portion is cut away and the strong proximal por-

tion is sutured with interrupted silk to the under shelf of Poupart's ligament. (Fig. 4). The peritoneum is closed with 00 plain catgut. The nerve is either cut or dropped back into the canal; if not cut, precautions are necessary to avoid including the nerve in sutures. The internal oblique muscle is then sutured with No. 2 chromic catgut to the under surface of the lower flap of the aponeurosis, as is done in the Bassini operation for hernia. The cut edges of the aponeurosis are

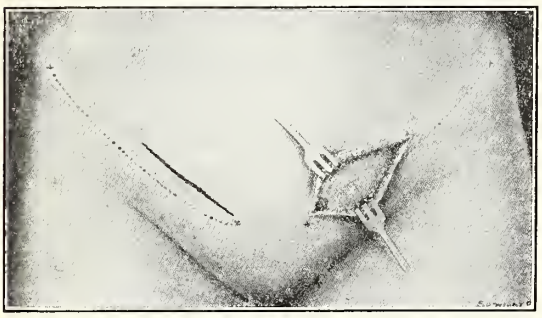


Fig. 1. The incisions. The retracted incision shows the superficial fascia. (OPERATIVE GYNECOLOGY—CROSSEN.)

then united with No. 2 chromic. The skin wound is closed with any material preferred. I prefer 00 plain catgut.

TECHNIC FOR THE ALEXANDER-GOLDSPOHN-PFANNENSTIEL OPERATION

If, after making the inguinal incision for the simple Axelander-Goldspohn operation and intra-abdominal palpation reveals a condition which prevents further procedure with this method, the two inguinal incisions are joined into a modified Pfannenstiel incision and the abdomen opened in the midline through the linea alba and peritoneum. The ligaments can then be used to peritonealize raw surfaces by suturing them to the posterior surface of the uterus, which effects sufficient shortening to hold the uterus in anteversion. If the ligaments are not needed to peritonealize they can be shortened extraperitoneally by retracting the corners of the incision sufficiently to expose the external ring and shortening done as described before.

The technical points to be emphasized are the following: Keeping the field clean with immediate hemostasis and the identification of all structures with sharp dissection will facilitate finding the ligaments and expedite the operation. The pubic spine must be kept as a guide-post for every step in the operation. Failure to use this important landmark and an excessive lateral retraction will lead the operator toward the rectus muscle. The superficial fascia may be mistaken for the aponeurosis of the external oblique and time is lost searching for the ligament between these structures. If tissue can be moved over the pillars of the external ring, the dissection has, probably, not been carried deep enough. Finding the ligament is facilitated by grasping the protruding contents of the external ring with a hemostat before the canal is opened. Traction on this hemostat after the canal is opened, and turning over the tissue made manifest by this traction, readily reveals the ligament.

INDICATIONS FOR A REPLACEMENT OPERATION

Therapy in retrodisplacement of the uterus should be rationalized and specified by strict indications. Therapy has not been standardized. A canvass of gynecologists would reveal a preference of some five to ten different methods.

The following pathological conditions and symptoms have been considered in the past as indications for replacement operations.

Non-puerperal Retrodisplacement—The generic term retrodisplacement is used here to comprise such terms as first, second and third degree retroflexion, retroversion and retrocession. These pedantic qualifications of nomenclature are dismissed as irrelevant. Retrodisplacement can be considered as an indication for a replacement operation only after consideration of the following axioms:

First, a retrodisplacement may exist without symptoms, especially when found early or late in life. A symptomless retrodisplacement does not warrant surgical procedures.

Second, retrodisplacement may exist with symptoms and the symptoms not due to the retrodis-



Fig. 2. A. The aponeurosis of the external oblique has been split and edge retracted with forceps. B. Tension on the proximal portion of the round ligament pulls out the cone of the peritoneum. The ilio-inquinal nerve runs parallel and under the retracted aponeurosis. (CROSSEN.)

placement. Surgical procedures are indicated after extragynecological conditions have been excluded, and the displacement and symptoms correlated.

Third, symptoms in a given case may be correlated with a retrodisplacement of the uterus; but non-operative treatment may relieve the symptoms. Therapy then becomes elective and the choice of therapy becomes the prerogative of the patient. Usually, a woman prefers operation to the continued, often ineffective, conservative treatment with pessary, knee-chest position, packing, etc.

Puerperal Retrodisplacement—Puerperal retrodisplacement should be treated prophylactically in the puerperium by insisting upon the ventral position; no abdominal binder after the second day; knee-chest position after the eighth day, and exercises in bed. A vaginal examination is advisable on the twelfth day and if displacement is found a pessary should be inserted. After one year postpartum, if displacement persists with symptoms and conservative therapy has not been effective, operation is indicated.

Pregnant Retrodisplacement—A pregnant retrodisplacement will usually rise out of the pelvis spontaneously. Prophylactic treatment with pessary can be carried out until the fundus is large enough to remain above the superior strait. A fixed pregnant retrodisplacement is an indication for operation. Replacement is facilitated with an anesthetic.

Pelvic Symptoms—Symptoms of backache, feeling of weight in the lower pelvis, low pelvic pain, headache, drawing sensation in the back of the neck, nervousness and other neurological symptoms, may be associated with retrodisplacement but not correlated with it. These symptoms are often due to associated diseases such as tumors,

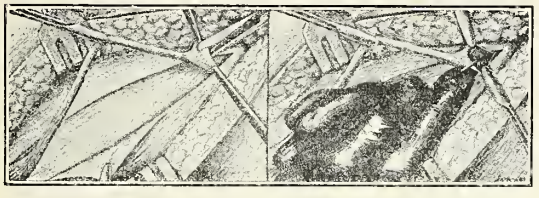


Fig. 3. A. The cone of the pulled-out peritoneum is opened with scissors. B. The finger is introduced into the abdominal cavity for palpation of the abdominal organs. (CROSSEN.)

adhesions, adnexal disease and injuries of parturition. Conservative treatment will often help in the differential diagnosis.

Urological Symptoms—Bladder symptoms may be due to a retrodisplaced uterus; but primary urological diseases must be excluded. A cystoscopic examination is essential and frequently ureteral catherization is needed.

Dysmenorrhea—Women suffering from dysmenorrhea have run the gauntlet of so many trial-and-error methods of treatment that one is reluctant to advise surgical therapy. The historically-minded can not further condone surgical procedures based on deductive concepts of this malady.

Menorrhagia—The evidence attempting correlation of menorrhagia and pelvic congestion incident to retrodisplacement is equivocal. Quantitative endocrinological research has established menstruation and menstrual disorders on cyclic ovarian phenomena.

Sterility—The modern gynecologist is reluctant to subject sterile patients to replacement operations until all other causes for sterility have been excluded. Hoehner tests, showing no sperm in the cervix but living sperm in the vaginal pool, would indict the retrodisplacement as a probable cause. Trial with pessary should be resorted to before operation is recommended.

CONDITIONS FOR A REPLACEMENT OPERATION

The prerequisites to be met by the gynecologist for replacement operations are the following:

First Condition: The patient must not be suffering from an acute inflammation. Treatment

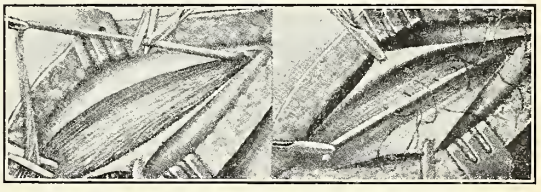


Fig. 4. A. The redundant portion of the round ligament is being removed. The aperture in the peritoneum has been clased with OO-plain catgut. B. The strong portion of the ligament and the internal oblique muscle are sutured to the under shelf of Poupart's ligament. The suture closing the aponeurosis of the external oblique has been started. The ilio-inquinal nerve has been cut to prevent postoperative pain. (CROSSEN.)

conducive to resolution of an inflammatory process takes precedence over operative procedures.

Second Condition: All extragynecological diseases should have been excluded or treated first; for a replacement operation is an elective one.

Third Condition: If the uterus is replaceable, a trial treatment with pessary should have been given in order to corroborate the correlation of symptoms and the existing displacement.

Fourth Condition: A replaceable uterus uncomplicated with adhesions, tumors and adnexal disease are the conditions requisite for the simple Alexander-Goldspohn operation; but, the Pfannenstiel modification extends the indications and mitigates the conditions.

ARGUMEMNT AGAINST THE ALEXANDER-GOLDSPOHN OPERATION

Criticisms found in the literature against this operation for retrodisplacement are, in general, as follows:

One: The operation is technically difficult.

Two: The ligaments are shortened by a separate incision in each inguinal region, thereby doubling the probability of suppuration. In the event of complications an extended incision is necessary anyway.

Three: The operation does not permit inspection of the abdomen.

Four: Concomitant diseases preclude the use of this operation.

ARGUMENTS FOR THE ALEXANDER-GOLDSPOHN OPERATION

The advantages of this operation accruing to surgical therapy for retrodisplacement may be listed as follows:

First. The Alexander-Goldspohn operation can be done under local anesthesia. For unexpected intra abdominal pathology the local anesthetic can be supplemented with a general anesthetic.

Second. The technic is simple when mastered. It is no more difficult, and certainly, not as involved as that of the radical surgical procedures now in vogue for retrodisplacement.

The length of the two inguinal incisions does not greatly exceed that of a midline incision, and are partly hidden in the inguinal folds and pubic hair area; giving a better cosmetic result than the more obvious midline scar. In the event of complications, when the extended Pfannenstiel approach is indicated, the incision need not exceed that usually made. Postoperative suppuration should not be more frequent in the inguinal region than in the midline. A clean wound will usually not suppurate.

Third. There are no intra-abdominal sutures or trauma, and no resulting adhesions to contribute to a secondary sterility or discomfort.

Fourth. When the operation is done correctly there is no distortion of the pelvic anatomy. The uterus is held in its normal physiological position, that is, a suspended, movable, anteverted uterus. The strong thick proximal part of the ligament is used for the suspension, which places this operation on a more rational basis than such procedures as plication and the Baldy-Webster operation.

Fifth. Future pregnancies following this operation can be permitted with impunity.

Sixth. A patient can be sterilized with this method by suturing the infundibulum of the tube extraperitoneally, as suggested by Menge.[9] This method of sterilization does not preclude future pregnancies; for, the tube can be released and dropped back into the abdomen.

Seventh. This operation satisfies the surgical principle that operative procedure should be so exclusive as to limit itself to indications, yet so inclusive as to be capable of extension to meet all conditions. This operation can be limited in scope to the original Alexander-Adams operation which excludes all operative procedure not pertinent to shortening the round ligaments, yet so inclusive that it can be extended to the Alexander-Goldspohn-Pfannenstiel operation when indications warrant and when conditions demand it. Inspection of the abdomen in a case of uncomplicated retrodisplacement can not be considered an indication for a laparotomy, when the status of the case can be ascertained with the first bimanual examination, preoperative work-up, examination under anesthesia before the incision is made, and finally, direct palpation of the pelvic organs through small aperatures in the peritoneum. If inspection of the adenexa is imperative, they can be lifted out through the small opening in the canal of Nuck by means of a small sponge on the end of a sponge stick. The sponge in the stick is run through with a long thread to prevent its loss in the abdomen.

CONCLUSION

Many gynecologists use intraperitoneal methods for shortening the round ligaments, but a replaceable, uncomplicated, retrodisplaced uterus does not indicate such a radical procedure. The Alexander-Goldspohn operation is an untraumatizing, simple, readily-executed and effective operation. This operation is so balanced in procedure as not to exceed indications, but, with modification, will fulfill all conditions. This operation should not be forced to take a compromising position to other surgical procedures for retrodisplacement which are less effective, too radical for a simple indication, and which enjoy an unwarranted popularity.

2712 ERIE AVENUE.

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Asthma

When an attack of asthma is quickly and completely relieved by the injection of adrenalin, it is usually due to allergy. In this way, adrenalin becomes a very good diagnostic agent, for it aids in separating the allergic from the mechanical and reflex asthmas. If adrenalin consistently fails to relieve the attack of asthma, the asthma is probably not due to allergy.

TREATMENT OF CONGENITAL SYPHILIS WITH ACETARSONE* (A PRELIMINARY REPORT)

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TO date there have been a number of reports on the treatment of congenital syphilis with acetarsone (stovarsal), all of them very favorable. Recently there appeared in the J. A. M. A. an article by Cole on the treatment of syphilis. In discussing the various drugs used in the treatment of lues in infants he dismisses with one terse statement the use of acetarsone. He states, "As yet I am unwilling to recommend the indiscriminate use of acetarsone by mouth in the treatment of congenital syphilis. It is still too much in the experimental stage".

Stokes in his book on modern clinical syphilology states, "Acetarsone has by no means proved its place in the treatment of syphilis, although a decade has elapsed since its introduction". He also states, "The general practitioner will be well advised to tread cautiously in this field and in no case to substitute acetarsone for the arsphenamines in the therapy of early syphilis".

This appears to be the attitude of those who treat adults mainly, or those who have had very little experience in the use of the drug and are influenced by case reports of severe reactions and fatalities.

It is our purpose in this paper to add our favorable experience of two years with the drug to the literature, as well as to attempt to show that acetarsone is an efficacious drug in the treatment of congenital syphilis, relatively non-toxic when properly administered and no longer in the experimental stage.

Acetarsone is a pentavalent, organic, arsenical said to have been the five-hundred and ninety-fourth compound synthesized by Ehrlich in the search that culminated in arsphenamine. It contains more available arsenic than neo-arsphenamine, containing 27.4 per cent arsenic, as contrasted to the 20 per cent in neo-arsphenamine. It is readily absorbed from the gastro-intestinal tract and eliminated through the urine and feces. It is a white, odorless powder having a slightly acid taste. It is supplied to the profession in 0.05, 0.1, and 0.25 gram tablets. Its toxic manifestations are mild when given in the proper dosage.

We have been very careful in explaining to the mothers of our patients the possibility of toxic manifestations and have asked them to watch for fever, vomiting, diarrhea, or rash. They are cautioned to stop medication with the first appearance of any of these signs and to bring the patient back to the clinic at once. We have had few toxic reactions due, we think, to the cooperation of our mothers and the low dosages employed. Whenever a reaction has occurred a rest of one week has been instituted and treatment resumed with a lower dosage.

The two methods of dosage that have been most widely used are those suggested by Bratusch-Marrain and Tuscherer.

Bratusch-Marrain Scale

5 mg./kilo	one week
10 mg./kilo	one week
15 mg./kilo	one week
20 mg./kilo	six weeks
	Rest four to six weeks

Tuscherer Scale

Days	Dosage	Number of times / diem
3	60 mg.	1
3	60 mg.	2
3	60 mg.	3
3	60 mg.	4
3	125 mg.	3
3	125 mg.	4
3	250 mg.	2
20	250 mg.	3

Our own method has been a modification of the Bratusch-Marrain Scale—

5 mg./kilo	two weeks
10 mg./kilo	two weeks
15 mg./kilo	two weeks
20 mg./kilo	twelve weeks

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Submitted December 6, 1937.

Each prescription is made up in 56 c.c. of water so that one drachm a day gives the dosage and allows for 14 doses. At the end of each course a Wassermann is drawn and the patient is given a rest period of one month, during which time mercury with chalk is taken. This is given according to the method outlined by Jeans of Iowa.

0 — 2 years	1/5 grain t. i. d.
2 — 6 years	½ grain t. i. d.
6 — 15 years	1 grain t. i. d.

If the Wassermann returns negative we give another course and repeat the Wassermann. If this, too, is negative we give a final course and then admonish the parent to return every six months for a check-up for the next two years.

After approximately two years of stovarsal therapy* we found that we had 10 patients who began their treatment after they had passed their first birthday. The oldest of this group was four. After one or more courses, five of these became serologically negative and five remained positive. However, every child showed clinical improvement. Two of the cases which became negative had just passed their first birthday and could almost be classed with the younger age group mentioned below.

On the other hand, of 23 cases below one year of age, who had positive serology, 19 became serologically negative and four remained positive after one or more courses.

Of these four, one died of pneumonia during the second course, one had only one course of therapy, and the remaining two were very irregular in attendance at the clinic. Of those who became negative, eight cases required more than one course before there was a reversal of the Wassermann.

There is not a single child in either group that did not improve under treatment. In general, the younger infants had more florid evidences of the disease. Eight had Parrot's pseudo-paralysis, six had snuffles, two of which were bloody, and one case had a marked hydrocephalus with nystagmus. All were malnourished and underweight. The reports of the mothers that their children were eating better and gaining weight became as monotonous as they were gratifying.

CASE REPORT

One case is worthy of special mention. Chrystal M. first attended our clinic when she was eight months old. She weighed 15 pounds, had never attempted to sit or hold her head up. The mother complained that the infant was very fretful and irritable and had a very poor appetite. We found a hydrocephalus with a markedly bulging fontanelle. A horizontal nystagmus was present and muscle coordination elsewhere in the body was poor. Liver and spleen were palpable, blood and spinal Wassermann were four-plus. Shortly after the institution of stovarsal therapy the appetite and disposition improved; after the completion of one course the clinical progress was truly dramatic. The baby was able to sit up, the nystagmus had disappeared, and she was even able to take a few tottering steps. In addition, she had made a substantial gain in weight. The serology, however, remained four-plus. After the completion of the second course, or 36 weeks of stovarsal therapy, the blood and spinal Wassermann had become negative but the clinical improvement was far more gratifying than the reversal in the serology. The sole remaining evidences of her disease were a barely palpable spleen and a saddle nose which is not marked. She is now on her fourth course of therapy, her serology has been repeatedly negative, and she resembles a normal child in every respect.

The eight cases of Parrot's pseudo-paralysis showed improvement after two weeks of treatment and after one month of treatment the paralysis had entirely disappeared. In all cases showing involvement of the osseous system, X-ray improvement could be noted after one month of treatment, and usually complete healing ocurred at the end of one course.

DISCUSSION

It seems to us that our clinic and the clinics of other hospitals has again demonstrated that that trite phrase, "early diagnosis, early treatment" is the keynote of success here, just as it is in almost every aspect of the science of medicine. Rosenbaum reports nine cases below one year of age with 100 per cent reversal of the Wassermann, six cases over a year with only 50 per cent reversal. Maxwell and Glaser report 12 cases under one year with 100 per cent reversal, Coppolino adds 10 similar cases. The latter also reports that of those infants under one year, treated with bismuth, only 50 per cent became sero-negative. He concludes that acetarsone is equal to bismuth in its ability to heal lesions, but appears to be superior in its ability to bring about an early reversal of the Wassermann. Rambar reports 32 prematures with the reversal of the Wassermann and Kahn, which remained so after one course of acetarsone alone or combined with mercury. Traisman feels that better results in older children will be obtained by combined bismuth and acetarsone. Givan and Villa record the treatment of 30 children with syphilis by the intravenous use of acetarsone. They obtained clinical improvement in every case and concluded that acetarsone was better tolerated than neo-arsphenamine and in larger doses than the latter.

We have confirmed the fact reported in all other clinics that the osseous lesions of syphilis are particularly amenable to stovarsal therapy. In every infant that we have treated that has had a specific osteitis or periostitis there has been

* Clinic introduced by Dr. Eugene Haber.

marked evidence of healing in less than a month after the beginning of treatment.

Practically all observers have reported that their patients gain rapidly in weight, which can be attributed only to a marked increase in appetite. Teizners and Neiderweisser noted this fact and have employed acetarsone in the treatment of nonsyphilitic dystrophy. This tonic phenomenon has also been an outstanding finding in our series. We have very carefully used acetarsone in the treatment of several prematures and in two cases of marasmus with excellent results. This tonic effect is not a negligible factor in gaining the cooperation of one's patients.

DISCUSSION OF TOXIC DANGERS

In a review of the literature, searching for reports of severe reactions, we have found six cases. We do not mean to imply that these are the only reports of toxic reactions to the drug, but they do demonstrate that erroneous impressions may be easily created if a careful consideration of dosage is not made. Oppenheim, who has had the greatest experience of all in the use of the drug, states that giant doses are superfluous. The poor results, as well as the toxic manifestations described in the early days of stovarsal therapy, can be ascribed to the so-called giant doses as demonstrated in the following case reports:

Glaser reports two cases of arsenical myelitis and neuritis due to acetarsone.

Case 1.—A twenty-day old infant weight 3.8 kg. was treated acording to Tuscherer's method of dosage. Over a period of 41 days the patient was given 21 grams of acetarsone. This is approximately ten times the dosage we employ. Dosage by our scale would have been as follows:

3.8 kg.	.005 gm./kilo	0.266 gms. acet. for two weeks
4.5 kg.	.010 gm./kilo	0.63 gms. acct. for two weeks
5.0 kg.	.015 gm./kilo	1.05 gms. acet. for two weeks
		1.946 gms. acet. over six-week period

Our scale would have given this patient approximately two grams, as compared to the 21 grams he did receive over the same period of time. The patient developed an arsenical myelitis from which he recovered.

Case 2.—A twenty-nine day old infant weighing 3.7 kg. was also treated by the method of Tuscherer. Over a period of 34 days the child received 7.68 grams of acetarsone. Compare this with our dosage scale—

3.7 kg.	.005 gm./kilo	0.259 gms. acet. for two weeks
4.1 kg.	.010 gm./kilo	0.574 gms. acet. for two weeks
		0.833 gms. total

The infant was given approximately nine times the dosage we would have employed. This patient expired.

Martin reports two cases of peripheral neuritis following acetarsone.

Case 1.—The child was a three-day old infant that developed a flaccid paralysis of the arms and legs after having ingested 16.5 gm. of stovarsal over a period of twenty days. Treated by us it would have received as follows:

3.46 kg.	.005 gms./kilo	0.2422 gms. for two weeks
4.0 kg.	.010 gms./kilo	0.28 gms. for the third week
		0.5222 gms. Total for 21 days

Martin gave 16.5 gms. as compared to the 0.52 we would have given; in fact, his dosage was thirty times what ours would have been.

Case 2.—A sixteen-day old infant that weighed 2.32 kg. when treatment was begun. If we had treated the child it would have received as follows:

2.32 kg.	.005 gms./kilo	0.1624 gms. for two weeks
2.86 kg.	.010 gms./kilo	0.2574 gms. for the next 9 days
		0.4198 gms. total

This infant actually received 16.9 gms. of spirocid in a period of 23 days. This dosage is approximately forty times our hypothetical dosage. After receiving this heroic amount of acetarsone the child developed a flaccid paralysis of the lower extremities. As a result of these two cases, Dr. Martin, himself, concludes that large doses are contra-indicated in small infants and that much better results are obtained with small dosages.

Dr. W. Curtin reports two cases of arsenical dermatitis, one of which expired and the other recovered.

Case 1.—A two-month old infant, weight 5.4 kg., developed an arsenical dermititis, edema, and subsequently expired after a fifteen-day course of stovarsal, during which time it received 2.25 gms. of acetarsone. Our own scale would have allowed for:

5.4 kg. .005 gms./kilo 0.374 gms. total dosage for 15 days, as compared to the 2.25 gms. it actually ingested. Approximately six times as much as we would have employed.

Case 2.—A three-month old infant, weight 3.8 kg., received a total dosage of 0.68 gms. in a ten-day period and developed an arsenical dermatitis. Under sodium thiosulphate therapy the patient recovered; treatment with stovarsal was resumed with no untoward affects.

3.8 kg. .005 gms./kilo 0.190 total dosage for ten days or approximately one-fourth as much as the patient actually received.

In the six cases we have just reviewed we have shown that these patients received from four to forty times the adequate dosage of stovarsal. We

feel quite certain that should parallel conditions prevail in the use of other potent drugs that similar intoxications would occur. It is not our desire to leave the impression that acetarsone should be given with impunity and that there are no cases of arsenic sensitivity, but we do wish to emphasize the fact that small doses should be employed and that at the first sign of toxicity, treatment should be stopped and resumed later. In the above cases symptoms appeared gradually and, had therapy been immediately stopped, the complications might have been avoided.

We strongly feel that the Tuscherer method should not be employed, especially in the treatment of small infants, as it is a rule of the thumb rather than a graduated scientific increase based upon dosage by weight, as outlined by Bratusch-Marrain scale or any modification thereof. We have used stovarsal in the treatment of infants and small children for two years. We have treated 27 children for syphilis and two members of the staff* have treated a total of six, outside of the hospital, by this same method. In addition we have treated two cases of marasmus and three premature infants who would not gain weight. Five cases were given prophylactic courses because of positive serology in the mothers but negative clinical and serological findings in the patients. These were not included in the previously mentioned series. In this total of 43 cases, one mild arsenical dermatitis and two mild gastro-intestinal upsets occurred. All promptly disappeared on a week's rest and therapy was safely resumed and continued. H. Rosenbaum** stated that in approximately 300 cases treated with stovarsal at the Children's Memorial Hospital in Chicago, he had never had more than an occasional dermatitis or a gastro-intestinal upset occur, and these were all replaced on therapy after a short interval with no further reaction.

We believe that stovarsal is a potent anti-syphilitic; that it is almost 100 per cent effective in the treatment of infants below one year of age; that it is relatively non-toxic providing a proper dosage system is employed; that in older children its role is that of a useful adjunct to heavy metal therapy to be used in the rest periods, between courses, thereby complying with the present day conception of continuous therapy and finally, that stovarsal therapy is no longer in the experimental stage and should be accorded its proper place as a potent drug to be used in the treatment of congenital syphilis.

We wish to emphasize again that reported severe toxic reactions have been due to massive doses and the failure to pay heed to the early mild manifestations of arsenic sensitivity which occasionally occur.

* Dr. E. H. Baxter—Dr. S. D. Edelman.
**Personal communication.

SUMMARY

1. A brief resume of the literature is given and 33 cases are added which have been treated for six months or more and which bear out the obsrvations of these writers.

2. The Tuscherer scale of dosage is not to be recommended since it leads to the use of massive doses that appear to be the cause of the severe toxic reactions reported.

3. At the first indication of a reaction, the drug should be stopped and the treatment resumed with a lower dosage after a week of rest.

4. There is sufficient clinical evidence at hand to place acetarsone among those drugs which can be safely and efficaciously used in the treatment of congenital syphilis. It is the drug of choice in the first year of life and is very valuable as an adjunct to heavy metal therapy in older children, its chief use, here, being in the rest period between courses.

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ECZEMATOID LESIONS FOLLOWING OCCUPATIONAL DERMATITIS VENENATA

By I. L. SCHONBERG, M.D., and A. MARCUS, M.D., CLEVELAND, OHIO

THE dermatologic sequelae of the occupational dermatitides have presented a problem to both the physician and the Industrial Commission.

The patient presents himself with a true picture of dermatitis venenata which subsides following various therapeutic measures. Several weeks later the patient, who may or may not have resumed his work, returns with an eczematoid process unlike the original dermatitis.

He may present: 1.—Pruritus with scratched crusted lesions as are often found following nickel poisoning, (nickel itch). 2.—Lichenoid areas composed of violacious flat topped lesions superimposing the original affected areas. 3.—Papular and pustular elements which often are pierced by a hair (folliculitis) and many times arise from trauma, scratching, and rubbing. 4.—A vesicular type of lesion which is composed of vesicles containing a clear fluid accompanied by oozing and fissuring. The above are often of entirely different character than the original dermatitis and it is often difficult to determine compensibility.

Many factors predispose to the formation of the secondary eczema. 1.—Some of the patients will give history of a definite allergic background —hay fever, asthma, or infantile eczema, or a family history of allergy. 2.—Examination of the feet often discloses maceration and vesiculation between the toes, which according to Peck gives rise to secondary dermatophytids and sensitize the entire organisms as a result of absorption of trichophytin by-products. 3.—The retention of metals and their products such as lead, nickel, chrome, copper, etc., would tend to precipitate eruptions from time to time by irritating the pilosebaceous apparatus. Chlorine often results in acneiform lesions due to the absorption and local irritation. 4.—Dyshidrotic lesions may be found on the fingers and webs resulting from dysfunction of sweat glands following destruction.

SYMPTOMS AND COURSE

Following a dermatitis from varied industrial irritants, the acuteness of the process subsides. There then ensues, mostly over the original areas, any one of the above described eczemas. This may immediately follow the acute process or occur several weeks later. Pruritis is usually the predominant symptom. Lesions may appear on unexposed areas such as the nape of the neck, flexor surfaces of the extremities, and occasionally on the abdomen, and back. In many cases where contact with the original offending agent has been avoided, the eczema will persist. The majority of cases have cleared subsequently to the usual methods employed in the treatment of allergic eczema. A few have been of the chronic and recurrent type of eczema.

Submitted November 2, 1937.

The Authors

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● Dr. Marcus is a graduate of Western Reserve University School of Medicine, 1922; department of casualty surgery, Lutheran Hospital, Cleveland.

TREATMENT

In cases that have presented a moist oozing type of eczema, wet dressings of Liquor Burrow 1-6 have been effective. When the above type has become superinfected, weak potassium permanganate soaks are efficacious. This is followed by a mild crude coal tar (1 per cent) in Lassar's paste gradually increasing the strength of the tar as the lesions subside. In recalcitrant types X-ray therapy is advisable. For dry types of eczema, oil of cade (5 per cent) in equal parts of white vaseline and lanolin is of great value.

Soaps and water are to be avoided since alkalies present in various soaps tend to irritate the process. As a result of destruction of the horny layers, water, which is readily absorbed, often results in irritation. Oil is used for cleansing.

Internally calcium gluconate intravenously and dicalcium phosphate by mouth are valuable adjuvants to therapy.

Autohemotherapy may be used in stubborn cases.

Prophylaxis is of prime importance. We suggest, 1.—A careful history by the plant physician in regard to allergic background. Allergic applicants should not be exposed to chemicals of any type. Patch tests should be performed. 2.—Proper protection with rubber gloves and aprons. 3.—The use of protective creams and oils on the hands and face of all workers ex-

posed to chemical fumes. 4.—The immediate treatment of all workers presenting skin irritation even though the involvement seems insignificant.

SUMMARY AND CONCLUSIONS

1. The types, apparent etiology, symptoms and treatment of eczematoid lesions following occupational dermatitis are reported.

2. A plan of prophylaxis is suggested.

3. We believe that many chronic eczemas following occupational dermatitis could be avoided and that the duration of treatment could be greatly reduced if this plan is instituted.

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The Intravenous Use of Morphine Sulphate

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In 1930 I[1] published an account of the advantages of administering morphine intravenously for therapeutic purposes. This was, as far as I am able to determine, the first reference in the literature to this procedure. Not until recently[2] has there been any publication of its extended use. Inasmuch as this method of administering morphine may be a life-saving procedure, in addition to its other advantages of immediate relief of pain and exactness of dosage, I am prompted to report continued success with this method after 20 years of use, and to encourage its more widespread adoption.

When called to treat a case of renal or biliary colic the usual procedure is to administer a quarter of a grain of morphine hypodermatically, wait 15 or 20 minutes to see if the dose is effective, and then to repeat the above, in event the desired effects are not obtained. When colics are treated in this fashion the patient is in agony for an unnecessary length of time, and accurate dosage, necessary for the relief of his symptoms, is not possible. In contrast to the aforesaid method, when morphine is given intravenously, the patient is relieved within a minute or a minute and a half, and he receives no more and no less than is absolutely necessary to relieve his symptoms.

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2. Betlach, C. J.: Proceedings of the Staff Meetings of The Mayo Clinic, Nov. 17, 1937, Vol. 12, No. 46, P. 733.

Submitted January 12, 1938.

The technique is simplicity itself. A half grain of morphine is dissolved in 1½ to 2 cc. of sterile water, and with an ordinary hypodermic syringe and needle the vein is punctured, and the morphine is injected **drop by drop** until the desired result is obtained. At this point the injection is stopped. The duration of the relief is the same, dose for dose, as if the medication were administered subcutaneously. Patients complain occasionally of pounding in the head and dizziness, which is usually indicative of the injection being given a little too rapidly. This occasional unpleasantness passes off quickly. Even in these occasional cases, and in all cases in which this method has been used in my experience, dating over 20 years, there have been no other untoward effects.

That this is a safe method of administration is also attested by the fact that the Mayo Clinic[2] administered morphine intravenously over 600 times in one year with no other unpleasant reactions than those stated above.

After using the above treatment for several years in the alleviation of colics, it occurred to me that the method would find as great, if not a greater field of usefulness in the treatment of coronary occlusions and cases of acute edema of the lungs. As in the colics, the relief from pain and dyspnoea is rapid and the dosage is exact. It may be life-saving in its effects, as in these cases the absorption from the peripheral circulation is exceedingly slow due to a failing circulation, and death may ensue before any effective absorption can take place. By the intravenous method the relief is almost instantaneous, and I have a feeling, that I have saved many lives by this procedure, due to there being no delay in absorption.

During the more than 20 years that I have used the intravenous method of administering morphine there have been no regrettable experiences. This has also been the experience of many of my local colleagues whom I have induced to use this method.

1001 Provident Bank Bldg.

It is evident that in this series a large proportion of the patients with peptic ulcer were markedly deficient in vitamin C. Theoretically, most of these patients should have been receiving a maintenance dose of the vitamin if they had taken the orange juice as advised. Careful questioning, however, revealed that many of the patients were not doing so either because they thought it was acid and as such should not be taken, because they did not like it, or because of some other reason.—Theodore H. Ingalls, M.D. and Harry A. Warren, M.D., Boston, Mass.; New England Jour. of Med., Vol. 217, No. 11; Sept., 1937.

IMPROVED HEALTH STANDARDS FOR ATHLETICS AND PHYSICAL EDUCATION

By JOHN W. WILCE, M.D., Columbus, Ohio

ATHLETICS and physical education had a long fight to become established and fully accepted members of the educational family. Athletics with gate receipts which built stadiums, dormitories, and made possible the best organization of alumni associations, have become a great power in educational circles in both high school and college.

RECREATION SYSTEMS OF GREAT MAGNITUDE EXIST

To suggest that this is not entirely a constructive power, with some health angles which are open to question, is open heresy to some. To one who has participated since 1900 as a grade school athlete, high school athlete, college athlete, high school coach, teacher, and intramural director, director of college intramural sports, Western Conference football coach, professor of physical education in active teaching capacity, and finally as a physician specializing in internal medicine with the preventive viewpoint, certain things have become clearer.

My thesis is simply that certain participants in physical education, intramural athletics, and inter-collegiate athletics are injured in a health way by their participation.

This number is not very great but it is greater than has been generally realized. Let me hasten to add my personal belief that the benefits derived in America by the participants in these fields of educational activity far outweigh the detrimental factors.

My thought is that those interested, parents, educators, physical educators, physicians, psychologists, and all health workers, need to face facts and cooperate so that the inevitable number of injuries from strenuous activity is kept at a minimum. There has been considerable investigation and writing about the traumatic injuries in sport but there has not been nearly enough written about the less obvious detrimental influences which are included in the medical and psychiatric field.

IS THERE A REAL NEED FOR IMPROVEMENT?

The first question is: Is there a real need for improvement in this field? I respectfully submit that a real need does exist.

In my capacity as director of a university health service, in one of the largest of the state universities, and in private practice, the end result of the athletic and physical education systems in the high school, junior high school, and lower grades, comes to my attention.

I am gradually accumulating definite data and evidence as to the need, and the present presentation is in a sense simply a progress report which will be illustrated with typical cases only, rather than a complete and completely scientific sound presentation.

In my estimation, there are two major divisions of need.

First, the needs for proper examination procedure before sports participation:

a. The first and most obvious is the need for some examination regardless of its degree of thoroughness, before participation in required or other physical activity.

b. The need for adequate health examination before such activity.

c. The need for adequate seasonal health consideration and post-disease follow up before subsequent activity.

d. The pointing out of situations where responsibility between general medical profession, health officers, health services, and physical education is so divided that cases with actual or potential inferiority factor fall in between the fields, in the matter of administration, to the detriment of the student.

Second, the real need for the establishment of minimal health standards for competition, to act as a general guide, only to physicians, in their decision as to whether or not it is medically and educationally correct for an individual to participate or not participate in some modified degree, in the varying types of required, competitive, or recreational activity.

THE NEED FOR EXAMINATION

The majority of the entering freshmen at Ohio State, in the fall of 1937, filled out a questionnaire aimed to get at the facts concerning the examination system before sports and physical

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Presented at the Eighteenth Annual Conference of Ohio Health Commissioners, with the Ohio Department of Health, Columbus, Ohio, November 5, 1937.

education participation in the state of Ohio. All the results of this material are not yet available.

Facts have been accumulated concerning approximately 500 students in the College of Commerce and Administration who theoretically represent the more business minded students, usually coming from the larger cities; and about 327 students in the College of Agriculture who represent a larger percentage of those from the rural sections and the communities below 2,500 in population.

The following statistics are revealing of:

a. Need of examination: C. & A. (489 students); 34.1 per cent not examined, 65.9 per cent examined. Agriculture (328 students); 55.4 per cent examined; 34.7 per cent not examined.

b. Adequate examination: C. & A.—52 per cent thorough (of total examined—294). Agriculture—35.3 per cent thorough (of total examined—328).

c. 1. Seasonal pre-sports examination: C. & A.—43.3 per cent examined; 41.7 per cent not examined. Agriculture—50 per cent examined; 36.2 per cent not examined.

c. 2. Examination before return to sport after sickness: C. & A.—examined 26.4 per cent; not examined 31.0 per cent. Agriculture—20.7 per cent examined; 47.8 per cent not examined.

In the light of this situation, is there evidence of injury to students? I have the distinct feeling that there is much more injury than we know.

In answer to the question, "Have you felt at any time your health has been handicapped in any way by your participation in competitive sports?" 2.8 per cent of the Commerce students, or about 11, and 4 per cent or nine boys, and 4.7 per cent, or 10 girls, a total of 29 answered that they had been handicapped by intramural sport, and seven of Commerce and 15 girls and 12 boys from Agriculture, or 27 answered that they had been handicapped by physical education; 18.8 per cent in Commerce and 13 per cent of the boys and 20.9 per cent of the girls in Agriculture did not answer the question which might increase the above numbers.

In addition to this evidence, the following list is at least suggestive.

1. College Football player. Sent to tuberculosis sanatorium in mid-season. Resting tuberculosis was either reactivated by his football or adequate examination was not given before the season.

2. College Football player. Started football season but did not have energy to continue. Examination revealed active tuberculosis. Lived in southwest for some years. Finally healed case. Adequate examination apparently not given before season.

3. Hearsay only. All around college athlete died of tuberculosis within a year after graduation from college. It is improbable that condition developed after his participation. Much more likely that condition was present during participation and was not discovered.

4. Similar case. Boy died within two years after having all around sports participation.

5. Inter-collegiate boxer. Minimal lesion the start of season. Allowed to participate at own request at Western college. Lesion much more advanced at the end of the season. Necessary to discontinue college to recover.

6. College sprinter. History of lack of energy. Friends thought he had athletic heart. Not examined before track in freshman year. Picked by chance. Found to have minimal tuberculosis.

7. Heart case in an Ohio college insisted on playing football, after acute tonsillitis. Died eight years afterward, after having followed coaching career, against which he was also advised.

8. Intramural basketball player. Previous rheumatic heart history. Picked up by chance with active rheumatic carditis. Not examined before intramural basketball season.

9. Student transfer. Excluded from intramural athletics in one institution, because of slightly exaggerated first sound in heart. Case picked up by chance. No evidence of other cardiac inferiority. Student in intramural athletics second institution without restriction. This is simply an evidence of the varying standards in vogue, because of difference in viewpoint concerning proper standards for participation in varying degrees of sport.

10. College football player. Five years away from sport. Blood pressure not included as part of sports examination. States that he had had blood pressure symptoms without the facts, while playing. Patient has malignant hypertenison at the present time. This is in keeping with Cornell statistics showing that blood pressures are most persistent future health hazards.

11. Intramural touch football player not examined before season. Very much enlarged heart with mitral stenosis. Very strong boy. No evidence that heart has been greatly damaged, but judgment is that this heart's future integrity is reduced by this degree of activity.

12. Football player with dementia praecox. Not discovered until 18 months after last college participation. May or may not have been connected with sports participation. Four psychiatrists stated that sport had postponed it, which I question.

13. Football captain committed suicide in spring of year following last football participation before graduation. Question of influence of his sports participation is distinctly pertinent, although it is not certain that it entered in a large way.

14. Football player exhibited symptoms of wildness, incoherence, and lack of control during football game. Almost certain to be a case of pre-dementia syndrome, probably open improvement through preventive mental hygiene program.

15. Football player. Blood in urine. Allowed to play in football game, because of his absolutely militant attitude and insistence on playing the game. Found to have congenital defect in kidney. No bad effects to date.

16. High School athlete. Distinct circulatory symptom. Approved for sport by two physicians. Found by specialized examination to have aneurism of descending aorta.

17. High school intensive basketball player. Never examined in high school. Examined for insurance after end of participation. Congenital heart suggested. Told by one physician to drop everything; by another one to go right on and play anything. Found at the University to have well compensated inter-ventricular septal defect.

18. Physical education student at college tak-

ing Russian dancing in physical education. Near end of school year broke down in open tuberculosis.

19. High school player in state of schizophrenia since High School basketball tournament.

The above are only a few of the cases that could be cited. They are given simply as presumptive evidence that there is a need for improved standards in examination of individuals in the field. Some of these conditions may have been prevented, others may not have been.

There is apparently a need for greater alertness in this field. I had the privilege of addressing a high school board of athletic control in Ohio which has instituted such a study. I also addressed an Ohio Student Health Association on the same subject last March and they now have a committee working. I recommend a similar thing to Ohio State Medical Association and now bring it to you. I hope to have started something worth while with cooperation.

ADEQUATE EXAMINATION

First improvement would be an adequate examination before participation.

What might be considered an adequate examination? At present, most of the examinations consist, in my observation, of investigation for hernia and auscultation of the heart. In swimming examinations, skin and ears are also investigated. Do not misunderstand my viewpoint. I appreciate the fact that in many places fine and thorough pre-sport examinations and necessary follow-ups are the fact and a great many are of the highest integrity. These physicians and systems are open to the highest commendation.

I absolutely know it to be the fact that the examination for many recreation leagues is not practiced. I have one example of the cardiac symptoms of syphilis in the case of a boy who was playing in three basketball leagues. A thorough examination is, of course, not practical in many cases; partly due to the practical need of a few, or even one, loyal physician being put to the need of examining a great many subjects rapidly, in some instance with an anxious coach hovering in the background.

In my estimation, even a minimum examination should include an adequate disease and symptom history, including tuberculosis contact information, pulse, temperature and blood pressure, in spite of the fact that we know of the great influence of nervousness on these examinations. A urinalysis, hemoglobin, and an examination of the throat and tonsils are also among the necessities, although it is very rarely a part of an examination for athletics. Evidence of sinusitis often develops, as we all know.

All candidates for competitive or intramural activity should be given the Mantoux test with every effort made to arrange for follow-up X-ray in cases of a positive reading.

Routine examination of the thyroid is also one of the necessities.

Attempts should be made to arrange full examinations by family physicians routinely, and other especially qualified physicians in the questionable cases. Regardless of everything else, this examination should be done.

Electrocardiographic investigation, basal metabolism testing, special blood counting, and other laboratory procedures should be available in certain special cases.

I know that the problem of getting complete examinations for many fine athletes who have no money is a real one.

MINIMAL HEALTH STANDARDS FOR ATHLETICS

There is a question as to whether it is desirable to establish an up-to-date set of standards for participation. The greatest weakness, in the present system, is that many individuals have no examinations or an inadequate examination before they enter sport.

I have talked to many physicians who feel the need of at least some guiding standards, to help them in their opinion as to whether or not a certain individual should be allowed a certain competition. When Dr. Markwith received an examination blank from the Ohio Inter-scholastic Athletic Association, he wrote them a keen letter bringing up the question of standards. Doctor Markwith has excellent evidence in this field. He is one of those whose great interest has prompted this presentation.

The great need of some such minimal standard, to help guide the individual physician, without binding him and allowing full individualization of cases, should be evident to all. I have known physicians to lose their jobs and lose caste by excluding an athlete from competition, when they are attempting to measure up to scientific standards of decision. Many of you could, no doubt, give similar examples. The man who has moral courage enough to give a thorough examination and at least advise honestly, on the basis of his findings and to the best of his knowledge, is open to great commendation.

I shall not attempt, in this brief presentation, to settle the question as to what shall be minimal standards for all of the varying types of activity. Cases will always have to be individualized, but I am sure a great many physicians would be greatly helped by having suggestive standards with which to back up whatever recommendations their own opinion prompts them to make. To my knowledge, there is only one such accepted set of minimal requirements. This is the set adopted by the American Association of School Physicians. It is very good and sound. I believe the high standard of this set of require-

ments has caused trouble which in a sense defeats its purpose.

The boy who is denied the privilege of athletics in these days, in many instances, is psychologically injured. No one has studied just how serious this injury is. In some cases I have seen, I am certain that the exclusion is much more detrimental to the well-being of the individual in question, than the injuries resulting from allowing him to play would be. I believe there are a great many instances of health defects which can be allowed to compete **in a modified** way, without appreciable injury, if any.

With certain classes of people, the statement made by Doctor Markwith was absolutely accurate when he stated that, "It has been my experience in examining boys or girls who desire to participate in athletics that, if the parents or the boy or the girl and the school are desirous of this child participating in athletics physical findings are quite frequently given little consideration."

Floyd Rowe took some issue with this statement saying that "We find parents usually very appreciative of any information given them in the right way, which makes it possible for them to better the physical condition of their children. There are those who fail to see the implications involved in the findings of a competent physician. For such, the association, the examining physician, and the school authorities will have discharged their responsibilities by a prepared recital of the physical findings, together with a reasonable statement of their implications." He further states as his opinion, which is of course shared, that the "value of this entire procedure is absolutely limited by the ability, integrity, involved in the findings of a competent physician.

Minimal standards for competition are different for competitive athletics. Contact games, such as football and basketball; non-contact such as track; special sports such as swimming, fencing have particular implications.

Minimal standards for physical training are, of course, open to division—qualifications for strenuous or non-strenuous physical education.

Doctor Worstell has very kindly advanced thorough orthopedic qualifications for such classified activity. The following are the standards advanced by the Association of School Physicians, with certain thoughts of my own, by no means complete. * * *

CONCLUSION

1. There is a general need for improved health standards for athletes.

2. The greatest need for improvement lies in the bringing about of at least some form of examination before participation which is denied many today and which is an educational injustice.

3. Need for adequate examination is real.

4. In many cases, proper adjustment of activity will not be made without specialized examination.

Health commissioners can be of great value in health education in this field, as well as in the furnishing of intelligent guidance. It would seem that a medical court of appeals might well be established to be the last word in the settling of doubtful cases. Absolute standards will never be fully accepted.

The set of minimum guiding principles of school physicians will be a great value to a great many physicians and should be studied and revised by the general profession of the searching scientific investigation.

Health commissioners can contribute a great deal to public health and the well-being of youth by contributing evidence they may have concerning cases of correct exclusion from sport, seemingly incorrect exclusion from sport, and working in this way for the establishment of higher standard of adequate examination and specialized examination in questionable cases in this great state of Ohio.

Your child, my child, and all Ohio children will profit in such contributions.

Early Hospitalization

Medical science has been revolutionized since 1900.

Just 36 years ago one of the veteran hospital administrators in this state was superintendent of a 50-bed hospital.

He said the other day, that the old institution didn't have a telephone; it had no signal system, no X-ray, no electrocardiograph, no basal metabolism machine, no insulin, no physiotherapy, no scientific ventilation. Such things either hadn't been thought of or were too new then.

Baths were given in portable tubs. When a doctor was wanted the steam whistle tooted for him. Food was just food of the boarding house variety.

Visiting hours terminated when a nurse raised a din in the corridors with a clanging school bell, regardless of the condition of the patients!

In those days of relatively little science the number of hospital employees figured about one to every two beds. Patients stayed an average of 31 days. The death rate was three times higher than it is today.

Today a hospital can't get along with less than one employee to a bed. But patients stay an average of only 11 to 12 days.—W. Va. Med. Jour., Vol. 33, No. 9, Sept., 1937.

New medicines and treatments are like Messiahs, which mankind yearningly longs for. Too often they are false Messiahs.—Fetterman.

GANGRENOUS DIVERTICULUM ASSOCIATED WITH SUPPURATIVE APPENDICITIS

By STERLING W. OBENOUR, M.D., Zanesville, Ohio

A SINGLE diverticulum of the juncture of the cecum and ascending colon, is a rare finding. In the following case, such a finding was made, the diverticulum, gangrenous, associated with an acute, suppurative appendicitis. I have been unable to find a similar case recorded in medical literature. The possibility of error in surgery is evident.

J. Mc C., white, male, age 52 years. Occupation, railroad conductor.

History: Two years ago, patient suffered an attack of what he termed, lumbago. This persisted for several days, and has reappeared at intervals since that time. Attacks were fairly severe, lasting from two days to four weeks. Patient, however, continued working.

On September 12, 1937, patient suffered an attack similar to those in the past. However, pain gradually developed in the lower abdomen. He worked September 13, but on September 14 became quite nauseated, with increasing pain in the lower right quadrant referred to back. Was admitted to the hospital at 12 o'clock noon and operated at 3:30 p. m. A typical picture of acute appendicitis.

Physical Examination: Temperature 97.4; pulse, 50; respiration 16.

Tall, thin, white male, age 52, with anxious expression, apparently suffering pain. Position in bed on back, right thigh flexed, several pillows under head.

Head—normal size and contour. Eyes—negative. Ears—negative. Nose—negative. Mouth—two teeth with cavities. Neck—thyroid negative. Slight anterior cervical adenopathy. Chest—normal size and contour. Breath sounds normal throughout. Heart—normal size. Regular force, rate and rhythm. No murmurs or accentuations. Abdomen—thin. No palpable tumor masses. Marked tenderness over McBurney's point, tenderness extending around right side to right lumbar region. Slight tenderness in epigastrium. Nausea on pressure.

Rectal examination—tenderness and pain elicited lower right quadrant. Genitalia—normal. Extremities—normal.

Laboratory Findings: **Urine**—straw colored, slightly cloudy. Reaction—neutral. Sp. gr.—1.006. Albumin—negative. Sugar—negative. **Blood Count:** Hemoglobin—79 per cent. Color Index—.96. Erythrocytes—4,130,000. Leukocytes—16,800. Small Lymphocytes—17 per cent. Polynuclear: Neutrophiles—83 per cent.

Diagnosis: Acute suppurative appendicitis, possibly retrocecal.

OPERATION

Right rectus incision. Inserting finger into abdominal cavity, a mass two inches long by one inch in diameter was palpated. This mass was elevated through the incision and gangrene of same was observed. The mass was half buried in the wall of the cecum and ascending colon. It was dissected free from the wall of the gut to an opening approximately one centimeter in diameter. The neck was clamped, ligated and removed, carbolic acid and alcohol applied to the stump. Due to the large area from which the mass was removed, no attempt was made to cover same.

About one inch above the opening, a small spot beginning gangrene of the wall was observed, about one-half centimeter in diameter. This mass closely resembled a walled off, gangrenous, suppurative appendix. Closer examination of the bowel revealed no illocecal junction at this point. A finger was then inserted and the cecum elevated through the wound, and in normal position a suppurative, highly inflamed appendix was delivered. It was about three and one-half inches in length by one-half inch in diameter.

The meso-appendix was tied and cut, the appendix clamped, ligated and removed. Carbolic acid and alcohol used.

Further examination of the area from which the mass had been removed revealed the opening lateral to the anterior taenia at the juncture of the cecum and ascending colon, the mass extending laterally, imbedded in the wall at the juncture. This area normally approximated the parietal peritoneum. A drainage tube was placed at the edge of this area. Wound closed in layers.

Examination of the mass revealed a diverticulum about one inch in depth, ⅝ inch in diameter, surrounded by lymphoid structures, very vascular. The diverticulum involving all layers of gut wall. The lumen contained a fecalith ½ inch in diameter plus soft fecal matter.

Recovery was uneventful. Drainage tube was removed on the seventh post-operative day. Patient walked out of the hospital on September 29, 1937.

COMMENT

This case emphasizes the possibility of the removal of a diseased structure and closure, with

Submitted December 16, 1937.

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another structure, definitely diseased remaining in the abdomen.

The question arises as to what caused the gangrene of the diverticulum. I believe, from the history, that this diverticulum has been filling and then discharging into the bowel for probably two years. The involvement of the appendix, same becoming suppurative, probably hastened or caused the gangrenous condition of the diverticulum.

SUMMARY

A single diverticulum of the ascending colon or cecum is a rare finding. A gangrenous diverticulum is unusual. As far as I have been able to ascertain, a single, gangrenous diverticulum associated with an acute suppurative appendicitus, has never before been reported.

Complacency following operations in which one diseased structure has been cared for, is dangerous. This case makes obvious the pit-falls of precursory examination.

Asymptomatic Scurvy

It is evident that in this series a large proportion of the patients with peptic ulcer were markedly deficient in vitamin C. . . Theoretically,most of these patients should have been receiving a maintenance dose of the vitamin if they had taken the orange juice as advised. Careful questioning, however, revealed that many of the patients were not doing so either because they thought it was acid and as such should not be taken, because they did not like it, or because of some other reason.

The amount of ascorbic acid in the blood plasma has been determined on 20 patients with gastric or duodenal ulcers. Eighteen, or 90 per cent, of them were found to have low values, 12 of whom had values of 0.2 mg. per cent or less as compared with the normal range of 0.6 to 2.0 mg. per cent. In most of these cases it could be demonstrated that the patients had actually taken an inadequate amount of vitamin C, and there is evidence that if a sufficient amount of the vitamin is ingested the blood values can be raised to normal. The theoretical importance of these findings in relation to the healing of peptic ulcer, to the bleeding of the ulcer and to surgical intervention is discussed.

It is important for the clinician to make sure that patients with peptic ulcer are receiving an adequate amount of vitamin C.—Theodore H. Ingalls, M.D., and Harry A. Warren, M.D., Boston; The New Eng. Jr. of Med., Vol. 217, No. 11, Sept. 9, 1937.

We are indebted to Dr. E. S. Emery, Jr., for his help in conducting this study.

Gonorrheal Conjunctivitis

Treatment with Sulfanilamide and Fever Therapy

By Claude S. Perry, M.D., Columbus, Ohio.

This case report, given in brief, is submitted, not as a review of the subject, and is not intended to represent what may be learned from a large series of cases. The dramatic results obtained in this one case justify its presentation for consideration by the profession.

Miss B, age 11 years; white; developed a conjunctivitis, Dec. 12, 1937, which was treated by home remedies until Dec. 16, 1937, when she was taken to a hospital clinic where the diagnosis of gonorrheal conjunctivitis and vaginitis was made.

When she was first seen in the isolation hospital the evening of Dec. 16, the right eye presented the usual picture of severe G. C. conjunctivitis without corneal involvment. The left eye was much more severely involved, the cornea being entirely denuded, apparently to Descemet's membrane. Spontaneous rupture was momentarily expected. The conjunctiva of the left eye was edematous and fissured, and the discharge at times contained blood.

The usual treatment was started at once, and in addition she was given sulfanilamide Grs. 5 every 4 hours, starting at 6 P.M. that evening and continued to Dec. 20. On Dec. 18, she received 10 hours treatment in the Kettering fever machine, her temperature being maintained at 105 to 106 Deg. F. On Dec. 19, the day following the fever therapy, the right eye was nearly normal. The outline of the meibomian glands could be seen through the conjunctiva. The left eye showed an equally marked improvement. The discharge became thin and stringy, and had disappeared by Dec. 24.

Prior to Dec. 20 the irrigations and installations were made at regular intervals, after this date they were given only as indicated, and discontinued on Dec. 24. The cornea of the left eye regenerated in the upper quadrant from 10 to 1 o'clock. The balance was scarred. The patient was kept under observation another day and was discharged on Dec. 26.

Apparently the combination of sulfanilamide and fever therapy will accomplish more than either alone.

Submitted January 4, 1938.

Pruritis vulvae, usually caused by monilial infestation of the vagina (where symptoms may be lacking—see LeBlaye, quoted by Popoff et al; American Journal of Obstetrics and Gynecology, 18:315, 1929), can more often be cured by 1:3,000 potassium permanganate douches than by any other therapeutic measure.—Richard L. Sutton, Jr.

THE TREATMENT OF PNEUMONIA † *

By G. S. SHIBLEY, M.D., CLEVELAND, OHIO

PRESENT day papers dealing with the treatment of pneumonia are often justly open to criticism. Their chief weakness lies in the fact that the management suggested practically assumes hospitalization of the patient. It is true that ideally effective pneumonia therapy is best accomplished in the modern hospital, but a majority of cases in city and country have to be cared for and will continue to be cared for at home. An effort will be made in the present article to keep this last mentioned point in mind.

Of paramount importance in the modern management of pneumonia is prompt and early clinical and laboratory diagnosis. Specific serum therapy is of value only in the first days of the disease. It is practically useless after the fourth day. Too often we wait for frank evidence of consolidation before accepting the diagnosis. By this time it is often too late for serum. The presence of pneumonia should always be suspected and faced with all its diagnostic and therapeutic implications when an otherwise well individual or one suffering from an early cold becomes explosively ill with a prostrating respiratory disease presenting any of the following symptoms and signs: Chill, high fever, rapid respiration, pleuritic pain, cyanosis or cough with rusty sputum.

LABORATORY DIAGNOSIS

As soon as the clinical diagnosis of pneumonia is entertained, laboratory diagnosis, i.e., pneumococcus typing, is demanded. Specific serum therapy constitutes the most important new effective weapons for cutting down the high mortality of this disease. Its correct use depends in turn upon accurate and early typing of the infecting organism. It is fitting, therefore, that a brief discussion of pneumococcus typing be entered into before proceeding with our considerations of treatment.

Less than 4 per cent of all cases of acute pneumonia are caused by organisms other than the pneumococcus. Hence the problem of laboratory diagnosis is essentially that of discovering the type of pneumococcus present. Current pneumococcus classifications include 32 types: The original types I, II and III and a subdivision of the old group IV into 29 additional types.[2] It is of academic and to some extent of prognostic importance to know the exact type, but this is very laborious work. For practical purposes we are concerned only with a few of these. Types I and II are the infecting organisms in over 50 per cent of cases and types I to VIII make up nearly 80 per cent. Further, and of particular importance, only a limited number are amenable to serum therapy. These include types I and II, for which good commercial sera are available, and types IV to VIII, and type XIV for which serum is becoming available. It is, therefore, only necessary to decide whether the infective pneumococcus is type I, II or III, or such other type for which serum is definitely known to be available.

Pneumococcus typing is carried out by sputum examination, by blood culture and on occasion by lung puncture. The last mentioned method is a highly technical hospital procedure and will not be considered.

The earlier rather long and laborious mouse technique of typing sputum has been supplanted recently by the rapid and accurate Neufeld method.[3] The specimen of sputum must be coughed up from the lung. With a little patience and some care a suitable sample can almost always be collected. It is placed in a sterile container and taken to the laboratory immediately. When sputum is difficult to get, material may be obtained by throat swab. A platinum loopful of sputum is now thoroughly mixed with a loopful of each of the type specific sera in turn upon a glass slide (a loopful of methylene blue is added for staining). A cover slip is placed over the mixture. Swelling of the capsule of the pneumococcus is then watched for under the oil immersion lens. It will appear in a few moments and will be diagnostic when typing serum and organism are the same. Neufeld diagnostic sera with the required amount of methylene blue solution may be secured from several of the biological houses. The test is fairly easy to learn and as stated above is rapid and accurate.

From the foregoing it will be clear that urgency and aggressiveness in both clinical and

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†Submitted for publication at the request of the Editor on January 10, 1938.

laboratory diagnosis and in treatment are demanded if we are to put into effect the newer knowledge of the management of pneumonia.

In the discussion that follows, treatment will be considered under seven headings: (1) General treatment. (2) Nursing care. (3) Treatment of special symptoms. (4) Oxygen therapy. (5) Specific serum therapy. (6) Chemotherapy and (7) Miscellaneous methods.

GENERAL TREATMENT

Bed Rest. Pneumonia like all serious infectious diseases calls for all possible supportive measures. Of these, absolute bed rest is most important. As soon as the possibility of pneumonia is suspected any getting out of bed should be prohibited. The bed pan and the urinal are compulsory. Rest should be so complete that all requirements are carried out by the attendant. Complete examination of the patient by the physician is best done only once a day except when circumstances are extenuating. In hospitals the gatch bed should always be used. At home a single bed, perhaps elevated with blocks, permits of more efficient handling of the patient by the attendant with less effort and strain upon both. Many methods of achieving comfortable positions in bed have been improvised and should be put into practice. These include pillows or blanket rolls under the mattress to raise the head end or under the region of the thighs to prevent slipping down in bed.

Ventilation. A large room is best. Ventilation should be ample but there should be no direct drafts upon the patient. When the patient is exposed for examination or treatments, windows should be closed and the room thoroughly warmed. Before the advent of oxygen large quantities of fresh air were used to combat cyanosis and restlessness. This is desirable when oxygen is wholly unavailable but in no way compares in effectiveness with the latter.

Nourishment. The diet in pneumonia has been said to be less important than in other infectious diseases and it is often stated that attention to calories is unnecessary. Actually, however, because of high fever with increased metabolism and restlessness it is wiser to conserve nutrition. This is particularly true as short duration of the disease cannot be predicted at the onset. If possible the patient's daily caloric intake should be held to 2,500 or 3,000. A varied diet may be obtained by the use of fruit juices, milk, cream, fermented milk, cereals, salted crackers, butter, cocoa, tea, coffee, soups, eggs, ice cream, custards and purees of vegetables. Lactose is of value in increasing calories and may be added to many of the above.

Fluids. Water and salt loss must be met. Fluids may be given as water, fruit juices, occasionally carbonated drinks, such as ginger ale, and other beverages. The total daily intake should be 3,000 to 3,500 cc. per day and need not exceed 4,000. Salt should be added when and if possible. When the patient is unable to cooperate in the ingestion of fluids, the difference may be made up by hypodermoclysis or by intravenous injection. Five per cent glucose in normal saline in the required amount may be given. Pulmonary edema is a contra-indication, especially to intravenous injection.

Elimination. Cathartics, especially dehydrating salines, are not advisable. A daily soap suds enema is desirable unless the bowels move freely. Fluids are of great value in elimination.

NURSING CARE

A tireless, competent, devoted nurse is invaluable in pneumonia. However, very often too much is asked of her. The responsibility of the patient's treatment rests in the physician's hands. He should not let too much responsibility devolve upon the nurse. The physician does well to see his patient at least two or three times a day and then may consult with and give directions to his nursing assistant in the many little and sometimes large matters that are constantly turning up if he watches closely.

When a nurse is unavailable as is often true in home cases, one or more members of the family should be selected and carefully instructed in their duties. It is well to leave all directions carefully written out. Order and calm are often made out of chaos by clear and explicit directions to the family.

The competent pneumonia nurse conserves the patient's strength, she anticipates his every need, she does much to encourage rest, relaxation and sleep and she works to sustain his morale. She will watch him viligantly at all times as disorientation, so common in this disease, may lead him into many foolish acts. She will protect him from the tiring attention of friends and anxious relatives. She keeps up fluids and calories. She sees that the room is cheerful and well ventilated. She will keep him warm with a "pneumonia jacket" and will protect him from chilling when he perspires. She will aid progress by changing the patient's position. Because pneumonia is an infectious disease she will observe careful precautionary technique and prevent spread to others and herself.

TREATMENT OF SPECIAL SYMPTOMS

Cough. Persistent hacking unproductive cough is most fatiguing, it is usually well controlled by oral codeine, 0.03 and 0.06 (½ to 1 grain); occasionally small doses of morphine are required. The former prejudice against morphine does not seem justified but in the author's opinion it must

be used sparingly and with particular caution if there is depression of the respiratory center. When the sputum is tenacious, increased humidity of the atmosphere, forcing of fluids and the use of ammonium chloride may be resorted to.

Pleuritic pain. Counter irritation in the form of mustard poultices or plasters and flaxseed poultices may be helpful. Chest binders are preferable to strapping which rarely should be used. Pleuritic pain like cough, is often best controlled by codeine or morphine. Diathermy is a cumbersome but sometimes helpful method of treatment.

Restlessness, Delirium and Insomnia. Codeine in doses of 0.03 to 0.06 (½ to 1 grain) is usually effective. In mild cases acetyl salicylic acid may suffice. In more severe cases small doses of morphine are indicated but large doses are to be avoided as these may profoundly depress the respiratory center. In such cases barbiturates or chloral and occasionally paraldehyde are preferable.

Abdominal distention. This symptom is common. When it becomes intractable the prognosis is usually grave. The daily use of soap suds enemas is often enough to prevent this complication. However, when it becomes prominent other methods must be used without delay. Among the most effective may be noted turpentine stupes, the use of a rectal tube, more irritating enemas such as those containing magnesium sulphate and glycerin, and pituitrin, 0.5 to 1.0 cc., or pitressin one cc., by hypodermic needle. Gastric distention occurs occasionally and is a grave symptom. It is best treated by gastric lavage.

Vaso-motor collapse. This is heralded by the appearance of low blood pressure, a rapid thready pulse, clammy skin, sweating and other symptoms of shock. Caffeine sodium benzoate 0.5 gm., adrenalin chloride solution 1:1000, 0.5 to one cc. and hypertonic glucose or sucrose are the drugs of choice.

Digitalis, once required routinely in pneumonia is being used now only when there is the specific indication of cardiac insufficiency based upon underlying cardiac disease. The basis for this change in point of view rests on the work of Wyckoff, Dubois and Woodruff[4] who found that its routine use in non-cardiac cases appeared harmful.

Pulmonary edema. This symptom requires prompt and vigorous attention, preferably in the prodromal stage before râles are heard. The intravenous injection of 100 cc. of 50 per cent glucose or preferably 50 per cent sucrose, frequently causes the disappearance of pulmonary edema with the result that patients often recover in spite of this usually fatal complication. Atropine sulphate 1/75 grain is often of additional value.

OXYGEN THERAPY

Anoxemia or incomplete oxygenation of the blood is a frequent consequence of pneumonia. The cyanosis present is directly proportional to the degree of oxygen desaturation. Much of the toxemia and many of the symptoms of the disease are directly related to the degree of anoxemia. If the patient is able to breathe 40 or 50 per cent oxygen the cyanosis rapidly becomes less or may disappear. In addition, restlessness, insomnia, rapid respiration, rapid pulse rate, abdominal distension and other symptoms may be much improved. In some cases the benefit from oxygen is so striking that its use seems to prolong life, thus giving the patient enough time to develop the immune reaction against his infection with consequent recovery.

The method of choice is the oxygen tent which has now been perfected and simplified. Practically all hospitals are supplied with suitable oxygen tents. The importance of the method in pneumonia and other conditions of oxygen want has been widely recognized and in most cities commercial firms exist which promptly provide and service such tents for home use. All physicians in or within striking distance of cities will do well to seek out such sources of oxygen tents.

Treatment with oxygen is begun early in the disease. The usual indications are any degree of cyanosis, marked air hunger or very rapid pulse. When in use it is important to be sure that the tent is effective. Leaks should be vigilantly guarded against. Increasing the rate of flow into the tent until cyanosis is relieved is often better than dependence upon theoretical rules or the more laborious method of O_2 percentage analysis. The patient should be placed comfortably in the tent with plenty of space about his head and with room for movement of his arms. The temperature of the tent must be watched and fan draughts guarded against. When the patient recovers, gradual withdrawal of oxygen is often necessary.

SPECIFIC SERUM THERAPY

Since the publication twenty years ago by Avery, Cole, Chickering and Dochez[5] of their excellent results with specific serum therapy in Type I pneumonia, abundant confirmation of the value of this form of treatment has been demonstrated. The method was given new impetus some years ago when Felton[6] successfully refined and concentrated anti-pneumococcus horse serum. Recently the method has been extended to include the treatment of several of the more common type of pneumococcus infection. Still more recently promising results have been reported

with serum obtained from immunized rabits. The real value of type specific serum therapy is well illustrated in Cecil's recent figures[7] on the treatment of Types I, II, V, VII and VIII pneumococcus pneumonia. (Table I).

TABLE I

Type	Death Rate Serum treated	No serum
I	15.7	37.7
II	35.0	46.3
V	9.6	28.8
VII	6.1	22.0
VIII	7.5	18.6

It will be seen from this table that with the exception of Type II the mortality rate is reduced well over one half.

The truly remarkable effect of serum therapy, however, is brought out in his figures for Type I cases treated early. (Table II).

TABLE II

Time of Treatment	Cases	Deaths	Per cent
First 24 hours	160	8	5.0
First 4 days	744	72	9.6
All days	1494	234	15.7
After fourth day	641	150	23.4
No serum	762	288	37.7

Inspection of this table brings out the striking fact that whereas 37 patients out of every hundred will die when serum is not used, only 5 will die if serum is administered in the first 24 hours and only 10 if given in the first four days.

In a recent series of cases treated by us in the first four days at the Lakeside Hospital the mortality rate was only four per cent whereas the rate for untreated cases was 31.6. Blankenhorn[8] at the Cincinnati General Hospital did not have a single death in his first 50 cases treated early and adequately.

It must be apparent from these figures that early typing and prompt adequate serum treatment will result in a striking saving of life in those cases of pneumococcus pneumonia for which potent serum is available. As soon, therefore, as the clinical diagnosis of pneumonia is made the type should be determined at once and if found to be suitable prompt adequate serum treatment should be begun.

Before proceding to use serum, however, it is essential to rule out possible allergic reactivity. The patient should be carefully questioned regarding attacks of asthma, hay fever, eczema, urticaria, angioneurotic adema, sensitiveness to horse dander or previous horse serum injections and when rabbit serum is to be used, sensitiveness to rabbits. Then tests for sensitivity should be carried out. These include the ophthalmic and intradermal tests. For the former a drop of 1:10 horse serum is placed in the eye. A positive test is indicated in from five to twenty minutes by an inflammatory reaction accompanied by watering and itching. The skin test is performed by injecting 0.2 cc. of 1:10 horse serum intradermally—a positive test is indicated by an urticarial wheal reaction in from five to twenty minutes. If the patient gives a definitely allergic history, particularly of asthma, or reacts strongly to the conjunctival or intradermal tests, serum administration is somewhat hazardous. Methods have been devised[9] for meeting this hazard but are outside the scope of this article.

If history and tests are negative, intravenous serum administration is begun at once. However, occasional anaphylactic manifestations may appear in individuals with negative tests, so it is always wise to have one cc. of 1:1000 fresh adrenalin solution at hand in the syringe before beginning injection.

The first dose of serum should not be more than 5 cc. (10,000 units, Felton[10]). It is our practice to dilute this with saline in a 20 cc. syringe or infusion set and to take twenty minutes for injection. If any sign of reaction such as increased dyspnea, asthmatic breathing, cyanosis, acceleration of the pulse, flushing of the face or urticaria appears, the needle is immediately withdrawn and 0.5 cc. of adrenalin is injected intramuscularly. The adrenalin injection should be repeated one or more times if the reaction is not controlled. After the first injection, there is little further danger of a reaction. However, the same precautions of keeping a syringe of adrenalin at hand and of slow injection of serum are advisable.

One to two hours after the first injection a second dose of 20 cc. (40,000 units) is given, undiluted. Two to four hours later a third dose of enough to total 100,000 units of serum is administered. This is usually enough serum for the average case with a negative blood culture. In severe cases or those known to have a blood infection 200,000 to 300,000 units may be needed. The dosage in these should be 40,000 to 80,000 units every two to four hours, until the patient's temperature and pulse have begun to fall definitely to normal. In cases where fever continues, even larger doses may be employed. Large doses are also called for in Type II infections.

When serum is effective, the result is usually apparent in 12 to 48 hours. Occasionally, par-

ticularly in septic cases, it may not appear until the third or fourth day. When failure occurs it is always well to repeat type determination to be certain that no mistake has been made.

Serum reactions are of three kinds: (1) The allergic reaction, the prevention and treatment of which has been discussed above. (2) The thermal reaction, which comes in one half to one hour, is a "foreign protein" reaction, and is characterized by chill, rise in fever and subsequent profuse sweating. It has no special significance. (3) Typical serum sickness appears in five to twelve days and usually gives comparatively little discomfort—this reaction occurs in 25 to 30 per cent of cases treated with refined serum.

CHEMOTHERAPY

The only specific chemical agent that gives promise of being valuable in the treatment of pneumococcus pneumonias is **sulphanilamide**. Following convincing experimental work in Type III infections in rats and mice[11], the drug has been administered to patients with this type of pneumonia. Reported cases are still meager but Bullowa[12] has recorded gratifying results in a few cases and we have had promising personal experience with the drug. Two cases with positive blood cultures and one gravely ill patient (culture not taken) but whose prognostic outlook seemed hopeless responded promptly to treatment. The initial dose for adults is 2 to 4 grams. One gram is given every four hours, thereafter, until an effect is obtained. Dosage should then be reduced rapidly. The now well known toxic effects of the drug should be carefully watched for. Final evaluation of sulphanilamide in Type III pneumonias and perhaps in other types will come only when enough cases to be statistically significant have been treated.

Quinine and its derivatives have been disappointing in all well controlled studies and are not recommended. **Alcohol** is of value only in those patients, especially older ones, who are accustomed to its use. **Glucose** has no specific value but has real indications as noted above in dehydrated or wasted patients, and in those in shock or presenting signs of pulmonary edema.

MISCELLANEOUS METHODS

Diathermy in our experience has no specific curative effect. Although often used or recommended, no suitably controlled studies have been published which show any effect upon the usual mortality of pneumonia. The method is of symptomatic use in relieving pleuritic pain. **Bacterial Vaccines** and other forms of foreign protein therapy, still occasionally used in the active treatment of pneumonia, have no place in the management of the disease and are not recommended. **Pneumonthorax** is still the subject of investigation[13]. It is a highly technical procedure, and even if it is shown to be of value in the treatment of pneumonia, it should be carried out only in hospitals by those trained to proficiency in its performance.

BRONCHOPNEUMONIA

A brief word should be said about the bronchopneumonias. A large proportion of cases are due to pneumococcus infection. Routine bacteriological study of the sputum is, therefore, indicated, and when pneumococci are present typing should be carried out. Types I and II pneumococci are rarely found but other types amenable to serum therapy may be discovered. The principles of management both as regards general treatment and specific serum therapy differ in no essential way from those outlined above.

When the hemolytic streptococcus is the infecting organism, sulphanilamide in adequate dosage is indicated immediately. The results with this drug are generally dramatic, particularly early in the disease. Many of us who had the opportunity to see the influenza pneumonias during the war have speculated upon the possible results this drug might have effected upon the appalling mortality of the disease of that time.

SUMMARY

An effort has been made to consider briefly the present day tendencies in the management of the pneumococcus pneumonias. It is pointed out that the disease attacks suddenly and that there is a need for urgency and aggressiveness in both diagnosis and treatment. Special emphasis has been placed upon the newer knowledge of pneumococcus typing and upon specific serum therapy. Brief consideration has been given to the use of sulphanilamide in pneumonia.

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TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by Its Component Society, the Ohio Public Health Association

THE IMPORTANCE OF GASTRIC LAVAGE FOR THE DEMONSTRATION OF TUBERCLE BACILLI IN ADULTS

Technique—Gastric lavages were made on a fasting stomach with 100-200 cm. of sterile water with sterile tubes and vessels. The sputum-like constituents were separated from the lavage water by means of sedimentation and centrifugation and the centrifugate was examined by means of:

a. Direct preparations on the sediment, stained according to Ziehl-Neelsen
b. Cultures on egg substrate according to Hahn's method after pre-treatment with 10 vol. per cent H_2SO_4
c. Inoculation on guinea pigs, which were examined post-morten after six weeks.

A test was considered positive whether culture alone, or in the guinea pig test alone, or both at the same time, were positive.

The guinea pig test proved to be the most sensitive. Only in a small number of cases were the cultures alone positive. A single negative lavage is but slight proof of the absence of tubercle bacilli, therefore the patient should be lavaged two or three days following the first test in order to obtain more certain and to make the period of waiting for the results as short as possible. This method, however, is too expensive for routine practice and the authors propose a further simplification as follows: The patients are lavaged on three successive days but the lavage fluids from each day are saved, and the total sediment is injected into one or two guinea pigs. This ensures optimal results at no great expense.

Classification—Disregarding all pathological-anatomical considerations, the authors divided the cases into four groups.

I. Those with apparently fresh alterations (Ranke's primary and secondary stages)
II. Those with alterations of older appearance (Ranke's tertiary stage)
III. Pleuritic cases with large exudates
IV. Pneumothorax cases

All of the 348 tuberculous cases studied in this investigation were either without sputum or had been proved to be bacillus-free by other current methods of examination. Group I comprised principally patients of about 20 years of age who exhibited primary complex with fresh infiltrates in the pulmonary area and corresponding swelling of the lymphatic glands. In some cases only an enlargement of the hilus gland was found. In this group of 97 cases 55 (57 per cent) were positive by gastric lavage.

Group II is the largest and, from the practical point of view, incomparably the most important. It includes cases with clinically established tuberculosis, most of which were of the older productive cirrhotic forms. Of the 141 cases without cavities, 43 per cent exhibited bacilli and in the 66 cases with cavities, bacilli were found in 94 per cent.

The social implications of these findings are important. These types of cases are generally regarded as "closed" or healed tuberculosis cases and not a menace to others, yet apparently about one-third of them excrete tubercle bacilli from the lungs. It appears also that practically all cases with cavity formation are also bacillus carriers whether sputum is present or not and whether tubercle bacilli can be demonstrated in the expectoration or not.

Group III comprises the extensive pleuritis cases where the pulmonary contours lying posteriorly could not be judged. In all these cases the appearance of the exudate was the first symptom of the outbreak of the tuberculosis. Seven cases out of 25 (28 per cent) were positive.

Group IV were cases lavaged during or after pneumothorax treatment, including cases in in which the lung was either compressed or relaxed and some possibly healed. Of the 19 cases examined 8 (42 per cent) were positive.

For the entire group of 348 cases supposed to be bacillus-free, 55 per cent were shown by gastric lavage to be excreting tubercle bacilli.

VALUE OF GASTRIC LAVAGE

The gastric lavage method for adults has several clinical and social advantages for it is the most sensitive test we know of for proving the excretion of tubercle bacilli from the lungs. From the diagnostic point of view it is valuable particularly in cases of pleuritis and in cases in which the roentgenological evidence is doubtful. It is often difficult to decide whether a lung infiltration is to be interpreted as tuberculosis, pneumonia, a limited pleuritic effusion, or a tumor formation. Ring shadows, enlarged intrathoracic glands and other conditions may be confusing.—Alf Guillbring and Nus Levan, Acta Medica Scandinavica's Förlag, Stockholm, Vol. XCIII, fasc. I-II, 1937.

CASE RECORD PRESENTING CLINICAL PROBLEMS

A Severe Cold, Cough, Fever, Sharp Pain in Right Chest

By HARRY L. REINHART, M.D.

CASE HISTORY

A WHITE male, 60 years old, was admitted to the hospital one week after the onset of a "severe cold", which was associated with cough, fever and a severe sharp pain in his right side. Although extremely weak, he had been semi-ambulatory until the day prior to admission. During the 36 hours previous to admission, his breathing had been labored, his "skin had been darker", and he coughed up some rusty sputum.

Physical examination on Admission: Temp. 103°. Pulse 120. Resp. 48. The patient was a poorly nourished, 60 year old, white male, manifestly cyanotic; respirations were very rapid and of a shallow abdominal type, with little movement of the chest. The right side of the chest was flat to percussion with increased tactile and vocal fremitus. Bronchial breathing was heard in the same region. Some rales were heard over the middle lobe of the right lung. Right base apparently negative. The entire left chest was negative, except for exaggerated broncho-vesicular breathing. Heart: rapid rate, and P_2 sound was greater than A_2. The abdomen was soft and slightly distended. The liver was palpable 2 fingers below the right costal margin. B. P. 112/60.

Laboratory Examination: Hb. 60 per cent; R.B.C. 2,640,000; total W.B.C. was 8,450 and 5,200 the following day; differential count 8 per cent segmenters, 54 per cent bands; 23 per cent myelocytes; 7 per cent monocytes; 1 per cent basophile and 7 per cent degenerated polymorphonuclears. Urine contained 50 mgs. of albumin, rare red cell, 4-6 W.B.C. per H.F. and an occasional hyaline and granular cast. S.G. 1.015. Blood Wassermann and Kahn test—negative. B.U.N.—52.5 mgs/100 c.c. Neufeld Typing of sputum; Type VII pneumococci present.

Course in Hospital: Patient's temperature remained around 103°, pulse near 120, and respirations from 40 to 50. The day following admission the entire right chest seemed to be involved. Two days after admission the temperature rose to 105.8°, dropped to 102.6°, soon after which the patient expired.

Dr. Reinhart:

This is the clinical history of a classical case of Pneumococcus Type VII infection of the lungs. According to the usual clinical concepts of pneumonia, when this patient developed a severe cold associated with cough, fever and a sharp pain in his right chest, he was "threatened with pneumonia", and when the rusty sputum, labored breathing, cyanotic skin and the findings above noted on physical examination, appeared he had developed pneumonia. However, if it had been possible to type the sputum from this patient soon after the onset of his illness, the pneumococci may have been demonstrated, and the cause of his illness determined. In other words the pneumococcus infection apparently existed for some time prior to the classical clinical reaction (i.e. the lobar consolidation) of lobar pneumonia. Sometimes the consolidation may be present with the clinical symptoms of the onset, or it may appear late, but the pneumococci in the bronchial exudate or lungs are indicative of pneumococcic infection, particularly if they belong to types I, II, V, VII or VIII.

Careful correlation of the anatomical appearances of the lungs with bacteriological studies at necropsy have revealed the etiological fallacy which may be implicated by the terms lobar and broncho-pneumonia. Lobar pneumonia does not necessarily mean a pneumococcus infection, nor does a pneumococcus infection of the lungs necessarily mean lobar pneumonia.

The pneumococci comprise a group of bacteria similar in many bacteriological aspects, but differing and divided into types according to their immunological reactions and the body develops specific anti-bodies for each type of pneumococcus infection. Hence, we have not one, but potentially 30 different types of pneumococcus infection of the lungs which may be clinically identical! These types are readily identified by the Neufeld method of typing the sputum, or material aspirated by lung puncture, or cultures of pneumococci. The typing depends upon a swelling of the capsule of the pneumococci, when it comes in contact with type specific anti-bodies. The typing of pneumococci is considered an emergency laboratory procedure and an active campaign is being conducted by the Ohio Department of Health, to establish typing stations in representative sections of the state. Practically pneumococcus typing may offer not only aid in early diagnosis, and prognosis, but opportunity for the early and efficient use of anti-body serum in certain types of pneumonia.

The modern clinical aspects of pneumonia are summarized by Cole, who states that "to the experienced observer in almost all cases the person, who has a chill, a fever over 102°, cough, pain in the side, rapid respirations and above all, who is expectorating sputum, which is bloody or even tinged with blood, has pneumonia. If the sputum is typed and pneumococci of type I are found, the diagnosis is certain and the therapeutic means for control of this specific disease is available".

This is the twenty-fifth of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

In this case the poor prognosis was indicated by the anemia and leucopenia with a marked shift to the left, as manifestations of the toxic depression of both blood cell production and maturation. The high blood urea nitrogen (52.5 mgs./100) was probably a manifestation of several factors such as the severe infection, failing myocardium, functional intestinal obstruction (tympanites) and salt depletion.

Anatomical Diagnosis:—Pneumococcus Type VII lobar pneumonia, right lung. Edema and hypostatic congestion, left lung. Diffuse chronic adhesive pleuritis, right pleura. Marked gaseous distention gastro-intestinal tract. Moderate hypertrophy of the prostate. Moderate coronary arteriosclerosis.

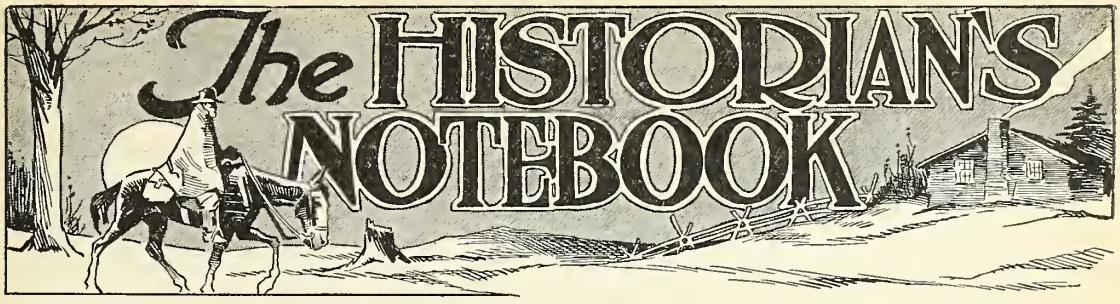
Dr. P. T. Knies, Commentator:

The poor prognosis in this patient was apparent from the outset on several bases. In the first place a state of malnutrition, as reflected in an anemia, and emaciation, is not conducive to good results in the treatment of pneumonia. The influence of such factors and possibly other factors in determining the response to infection is shown by the leucopenia manifested in this case. Furthermore, pneumonia at the age of 60 years is always a disease of dire prognosis. The insidious onset, lacking the vigor usually expected in a pneumonia, was of poor prognostic import. The elevated blood urea nitrogen of whatever cause was similarly unfavorable in regard to the patient's recovery. Chief among the factors possibly responsible for the fatal outcome, however, was the cardiac failure indicated in this instance by the pallid shade of cyanosis mentioned in the original description of the patient on entry to the hospital, and the enlargement of liver which may or may not have meant increase of venous pressure in the great veins draining to the right side of the heart. It is such an instance as this, where dyspnea, cyanosis, orthopnea, and tachycardia are of equivocable import, that the determination of venous pressure may offer a diagnostic procedure giving insight to the cardiac situation in spite of the disturbance of the more usual criteria by the pulmonary infection. In a series of venous pressure determinations it was our conclusion that the chief value of such procedures were in such instances as this where the ordinary findings were not definitive in their interpretation.

In discussing the physical examination of this patient it may be of value to point out that exaggerated broncho-vasicular breath sounds were noted on the side unaffected by the pneumonia directly. It is a failure to recognize the expected increase in intensity of breath sounds over the unaffected lung or portion of lung in pneumonia that frequently leads to a misdiagnosis of infiltration.

Dr. Reinhart has already emphasized the importance of discarding the now almost archaic concepts of lobar and broncho-pneumonia so far as they relate to specific types of disease etiologically. At present the important point to be determined in a diagnosis of pneumonia is not the distribution of the disease so much as its bacterial causative fact. The methods of typing of the pneumococcus have undergone a great deal of improvement with their latest refinement, at least so far as reduction of time is concerned in the Neufeld capsular swelling reaction. That this reaction is dependable when made with reasonable care and experience has been amply demonstrated in the literature. From a practical standpoint it is probably not necessary that many other types be considered than those for whom effective therapeutic antisera are available. This matter has been beautifully discussed recently by Drs. Benjamin and Blankenhorn in the Archives of *Internal Medicine* and *The Ohio State Medical Journal*. If these methods be diligently and promptly applied, and if a type for which a specific serum is developed is found, it considerably enhances the patient's opportunity for recovering. The procurement of the sera still constitutes a major problem not solved in this state or city where the provision of serum is not made for indigent cases. Its cost, however, has been brought to the place where the usually necessary 80 to 150,000 units of anti-serum will subject the patient to expense no greater than that usually incurred in the average appendectomy, the cost of which is not usually considered prohibitive, where the procedure is strongly indicated. Refinements in the technic of administration are not yet standard and dilution of the serum is advocated by many though not practiced by others. The preliminary testing for sensitivity is easily and quickly accomplished, and apparently reliably enough that severe reaction need seldom be feared. It is certain from many excellent articles on the subject, that the administration of type specific serum in the treatment of pneumonia is on a firm basis. It will undoubtedly be rendered more effective by the earliest possible application.

In regard to this early recognition a point may be made in the present case. It is to be noted that the patient was ambulatory for some days before being considered sufficiently ill to necessitate hospitalization. It has been our privilege not infrequently to detect by the routine fluoroscopy of the chest in cases of all respiratory infection, upper, lower, or combined, to find occasionally a consolidation which had not been suspected from the degree of apparent illness and the absence of the customary cough, rusty sputum, chills and the like. It is probable that radiographic examination is of sufficient diagnostic value that where it is obtainable it should be employed as an initial rather than a confirmatory procedure.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

BLAZING THE TRAIL

By WILLIAM THOMAS CORLETT, M.D., L.R.C., Lond., Cleveland, Ohio

IN the new country of Ohio there were other trails to blaze than those of the unbroken forest. With men came disease and bodily injuries which called for medical men. Thus medicine had its pioneers and later some of its specialties began to develop—but slowly—very slowly.

To this western country as early as 1843 there came a man from the east, Noah Worcester, who may be likened to a morning star in dermatology, because he wrote a book entitled, "A Synopsis of the Symptoms, Diagnosis and Treatment of the More Common and Important Diseases of the Skin, with Sixty Colored Figures". It was published in 1845, the first on dermatology in America. Pusey in his History of Dermatology says: "He acknowledges his indebtedness to the European masters from Willan and Wilson to Rayer and Gilbert, but his work shows first hand knowledge of Dermatology." That the work had merit and was abreast of the teaching of the time I believe, and the illustrations are as good as found in contemporary works in Europe.

Apparently it had, however, little influence in blazing the trail in this department of medicine. Possibly because there were no wise men in the east to recognize this bright luminary appearing in the western sky.

Had he lived barely a half century later his scholarly attainments and well grounded knowledge of medicine, particularly its basic principles gained in the leading medical centers of Europe, now taught by full-time men, would have placed him in the foremost rank in his profession.

But he lived too soon for his environment, and died too soon, at the age of 35, to fulfill what his brilliant mind might have accomplished. As it was, meeting the greatest need of the time and place, he devoted himself to physical diagnosis and general pathology, and was professor of these subjects in the Medical College of Ohio at Cincinnati and later in the Cleveland Medical College, now the medical department of Western Reserve University.

The eulogy pronounced by his colleagues at his obsequies at Cleveland in 1847, was: "A leader in pathology and the best trained man in percussion and auscultation in America." He had worked his way, he was an A.B. of Harvard (1832), an M.D. of Dartmouth (1838), and in 1841 studied in Europe for two years. He died of tuberculosis—doubtless a martyr to his profession, (1812-1837).

While in history his book entitles him to be called the morning star in dermatology in America, yet his work places him as a foundation builder in the general field of scientific medicine rather than a pioneer in one of its specialties.

And thus, "winter itch," "lumberman's itch," "prairie itch," and the "seven year itch," went merrily on—for scratching in these is comparable to sexual gratification.

And now to the more commonplace of trail blazing—its accomplishment.

I have often been asked why I chose diseases of the skin as a major subject in medicine. We all, I presume, are more or less the victims of circumstances and so it may be in my choice of a profession.

As a small boy on an Ohio farm, the mud-bespattered country doctor inspired in me a longing ambition. Graduating in medicine at the age of 23, although I appeared younger—and really

The Author

● Dr. Corlett is professor emeritus of dermatology and syphilology, Western Reserve University; president of the Cleveland Medical Library Association, 1929-30.

Readers desiring reprints of articles appearing in this department must place their order with *The Journal* within 15 days after date of publication.

was two months younger, I did not find, strange as it seemed to me, the world waiting to receive me. In fact my canvass of near-by towns in search of an opening, my interviews with old physicians, whom I had heard wished to retire with an assistant, failed to secure for me a start in the general practice of medicine. On account of my inability to secure political influence, even an assistantship in a hospital for the insane was inaccessible. But time was passing and I felt that I must make a start.

I opened an "all night" office in the center of Cleveland on the corner of Euclid Avenue where the Williamson Building now stands, and as a source of ready money secured the district physicianship of "Whisky Island" and "Irish Town" then so-called, at the munificent sum of twenty-five dollars a month, I furnishing medicines and office rent.

During this year, one of the most illuminating in my life, I met with several cases of skin diseases concerning the nature of which even the wisest physicians seemed not to enjoy complete unanimity of opinion. These cases I still remember. Then again I had an uncle, after whom I was named, who was obliged to give up parish work as a clergyman on account of an intractable disease of the skin, later elucidated by Dr. Duhring as *dermatitis herpetiformis*. Frequent association with this uncle, who seemed to know a number of prominent men who had some obscure disease of the skin, for which they had traveled far and wide for relief, induced me when I had determined to go abroad for further study, to find out all I could about diseases of the skin. Accordingly in my course of study I majored in dermatology and syphilology when time afforded and reveled in the rich field of clinical material London and Paris supplied.

Returning home in 1881, I resolved to make dermatology and syphiology my special field of endeavor. My medical friends, many old and experienced in medicine, advised against my limiting my practice to this field, saying, "You are well equipped in general medicine and surgery, why confine yourself to an unknown specialty from which you cannot derive a decent living." With this wise council I was loath to agree. Thinking with a headquarters in one of the medical schools of Cleveland (there were two regular schools at that time), by adding Detroit and lecturing at Ann Arbor with a possible side stop at Mt. Clemens Springs, I might find sufficient material to occupy my time.

As in my first effort to secure a position or foothold in general medicine, this too failed to give me any encouragement. Notwithstanding this, I settled down in Cleveland, was appointed lecturer on skin and venereal diseases in Wooster Medical College, and started the first clinic for skin diseases in northern Ohio.

It was not an easy task I had undertaken. Waiting for patients that did not come was not especially alluring. But by giving lectures on the care of the skin as occasion offered, by discussing diseases of the skin and reading appears before medical societies, gradually there appeared in my consulting room physician's wives and their children, together with clergymen and their dependents (who at that time were on the free list) and thus I secured an unprofitable beginning. But like "bread cast upon the waters", within two or three years I began to have paying patients which increased as time went on.

Starting an unknown specialty had many drawbacks which the men of today do not encounter. Foremost was the education of physicians to recognize divisions in the practice of medicine in hospitals and clinical appointments. It was only through hard knocks that gradually this obstacle gave way. I will relate one or two instances.

Among my early hospital positions was that of dermatologist to the City Hospital. But there was no department of skin diseases as such and I relied for my clinical material on the courtesy and good judgment of my colleagues.

On one occasion going through the surgical ward I saw a suspicious looking patient which on closer inspection I recognized as a case of leprosy. Investigating further, I found that no diagnosis had been made. The case had been assigned to the surgical ward, and surgery whose main business it seemed was to cut, began to cut away the leprous lesions. One or two operations had been made before the case came under my observation.

In a report of the One Hundredth Anniversary of the Cleveland City Hospital, the following appears:

"Breaking further, one finds considerable clinical curiosa; Chart No. ____. Progress note: This patient has been here for many months undiagnosed. Today Dr. Corlett made rounds and recognized the case as one of leprosy.

"Conjure up the picture on that distant Sunday morning; a flurry of bed-fixing, face-washing and hair-combing among patients and nurses for the weekly ceremonial. Visualize the pontifical procession of visiting chiefs, assistants, associate and residents, interns, and finally the nurses in the rear with ready tongue blades and paper bags. Dr. Corlett, just home from a foray into sub-tropical diseases, looks casually at the patient who is sitting up in bed eating his Sunday dinner. 'I see you have a case of leprosy here.' Immediate petrification of parade! A stampede toward the startled patient, a biopsy and a frozen section stained for Hansen's bacilli! Diagnosis confirmed! City Hospital in the headlines; curious but cautious reporters poking their faces through the iron fence on Scranton Road, beckoning frantically to house men to come out and give them the gruesome details! The clamor of other patients for immediate discharge and hasty resignations of tremorous attendants. A bewildered leper riding across the country toward Hawaii in

an elaborately equipped horse-car in company with a lot of canned goods and a gleeful intern, who had just had inside information that leprosy was no more contagious than tuberculosis."

In this report, it would seem that I had acquired a knowledge of leprosy in a visit to the West Indies. My first contact with the disease, however, was a case studied, as far away from the patient as I could well see, in the London Hospital, where with fear and apprehension of the future, since I knew the period of incubation was a long one, I gained my first clinical knowledge of leprosy. In Paris, however, I found leprosy not uncommon, and cared for in the general ward. I was somewhat startled, however, one day while riding on the top of an omnibus to see my next neighbor on the seat to be a leper I had the day previously seen at the Hôspital Saint Louis.

My greatest annoyance at this period was my inability to secure the complete cooperation of some of my colleagues. Not that they were antagonistic to my securing material for my department, but it was new, and assigning cases is not always an easy task without the cooperation of all the staff.

The subject of syphilis, too, was not a favorite theme in polite society at that time—nor in the hospitals of Cleveland.

A few days before the new Lakeside Hospital was opened in 1898, meeting on the street one of the most active of the trustees, he said to me, "I see in the college catalogue that you are professor of dermatology and syphilology. You know we are not going to have any syphilis in Lakeside Hospital." I replied, that will be fine, but why not leave it to the head of the department. He will not disgrace the hospital by admitting syphilis except under proper conditions. "Well," he replied, "we are not going to have syphilis in Lakeside." With this he passed down the street.

Two months later, after the hospital had been opened, in walking through a corridor I met an orderly with an unmistakable syphilitic eruption on his forehead, which I reported to the superintendent. Needless to say he was discharged. A month or so later one of the nurses on active duty also presented a secondary syphilitic eruption. This was also reported to the superintendent and she was eliminated from the corps of nurses.

When Ehrlich discovered salvarsan, before releasing it to the drug trade he sent a supply to be given to some clinicians in the United States who were working in syphilitic clinics.

At that time it was thought necessary to hospitalize patients given "606", as it was then called. I succeeded in securing a few beds in Lakeside Hospital, Charity Hospital, St. Alexis Hospital and the City Hospital the largest number. At the end of three months, my supply being exhausted, I gave a clinic, inviting physicians from Buffalo to Detroit and southward to Columbus.

The amphitheater in Lakeside Hospital was filled to the topmost seats with men eager to see the results of this new *Therapia Sterilisans Magna* supposed to eradicate syphilis with one dose. I showed photographs of the patients before treatment and the patients after treatment. The results were remarkable almost startling. There were local necroses in two or three patients, but the thought that intractable cases of syphilis were permanently cured by one fell swoop as some one expressed it, made the local disturbance seem trivial.

It then became known that I had occupied all available space in the various hospitals in this district with syphilitic patients. Whereupon the superintendent of Lakeside Hospital told me that he was cognizant of what I was doing, but on account of its importance he had been lenient but now he must insist on the rules of the hospital not to admit patients with syphilis.

Knowing that some of my colleagues were fond of treating syphilis under various names, I found on a quiet investigation that 30 per cent of the cases in a medical ward gave a positive Wassermann reaction. Nor was syphilis the only *bête noire*.

A house physician said to me one day: "There is a case in medical ward ____ I think you would like to see." We went to the ward, he threw back the bed covering, and after a moment's examination I asked how long the patient had been in the ward. He replied four days and that it was treated for an iodide of potash eruption. Recovering the patient as I turned to leave I said rather casually, an excellent case of small-pox.

A case of small-pox in an open ward four days, and at a time when few people had been vaccinated, was not a thing to be made light of. A staff meeting was called within a few hours and through the error of a secretary I was not notified. The next morning a staff and trustee meeting was called to take measures to combat a smallpox epidemic not only in the hospital, but in the community at large, as the sequel proved.

One of the trustees—of treasured memory—said: "We have a man on our staff trained in eruptions of the skin. Why was he not called to see the case?" The rule was then made that all patients with an eruption regardless of what it might be thought to be should first be examined by me before being assigned to the ward.

From that time the department of dermatology-syphilology received all the material to which it was entitled. I might say further that at that time and for many happy years thereafter the dermatologist enjoyed the distinction of being considered supreme in this vicinity on all cutaneous eruptions whatever their nature.

A SCHOOL FOR "TYPERS"

By JAMES M. RUEGSEGGER, M.D., Cincinnati, Ohio

THE present and growing enthusiasm for the specific serum treatment of pneumonia is no longer confined to the medical profession. Recent articles in newspapers and tabloids may force the incongruous position of patient dictating to the physician the mode of therapy in certain instances. While it is gratifying, to a certain extent, that the medical public should be apprised of some aspects of disease, especially from a public health standpoint, an unbridled program of publicity in such matters is fraught with pitfalls, which may defeat the purpose of the program entirely.

Serum therapy, in certain well-selected cases, has been proven to be effective in reducing the death rate, as well as in shortening the duration of illness. The keystone to success in serum therapy is, without doubt, rapid and accurate typing of the etiological agent. The Neufeld reaction, introduced into this country by Sabin in 1933, has, undoubtedly, contributed more to the use of therapeutic serum in pneumococcic pneumonia than any other single factor. Despite the apparent simplicity of the reaction, especially as detailed in advertising matter, too much reliability should not be placed in results of an untrained observer. In the first place, the finding of a pneumococcus in a patient, for which there is therapeutic serum, should not demand serum therapy unless the clinical condition warrants the diagnosis of pneumonia. The technician should be trained to identify sputum which is typical of pneumonia patients. Likewise, the finding of a pneumococcus in a sputum containing many squamous cells and mouth flora should not mislead one into a mistaken diagnosis of the etiological agent.

Of paramount importance to a laboratory for pneumonia typing is a good microscope with an oil immersion lens; a binocular eyepiece is preferable and much less tiring. Illumination should be from a strong incandescent bulb. The Neufeld reaction on the sputum directly is not difficult to interpret if the organisms are numerous, and if the sputum is not tenacious. However, it should never be forgotten that all pneumococci have capsules which appear as halos around the nucleus; the weary eye is, at times, inclined to interpret this halo as a "quellung." For that reason, and, also, for epidemiological statistics, negative reports for the treatable types should never be encouraged. It is far more satisfying to the technician, and to the physician as well, to know what type of pneumococcus a sputum contains, rather than what types it does not contain. On the other hand, partial typing, or typing until a type has been found should not be encouraged; infections with more than one pneumococcus are not rare, and may well be the key to certain cases of unsatisfactory serum therapy.

In every laboratory where there is a brisk typing service, there will be a certain small percentage of specimens which will not lend themselves readily to direct typing by the Neufeld method. Some specimens of sputa may contain so many pneumococci that agglutination or a swirling effect may be seen when mixed with homologous serum. Dilution with sterile saline will bring out the "quellung" reaction in these cases. Very tenacious sputa are difficult to handle, and their mixture with small amounts of serum is almost impossible. Such specimens become much more amenable to typing if emulsified with a small amount of sterile saline; this is very easily accomplished by the use of a 2 cc. syringe. Other specimens of sputum or exudate may contain so few organisms that the direct typing will require too much time and effort to be profitable. After a reasonable trial at direct typing, these specimens should be inoculated into a test tube of dextrose blood broth (Avery); incubation for two to four hours will usually produce sufficient growth to facilitate another direct examination. Pharyngeal cultures, frequently used in children and in people unable to cough, may be treated in the same way. Cultures from lung suctions may also be treated in this manner and typed directly. Certain other specimens may be so contaminated by mouth flora, or overgrown by other organisms that typing becomes too arduous. In such instances, inoculation of the specimen into the peritoneal cavity of a mouse is desirable; peritoneal exudate may then be withdrawn by means of a capillary pipette in four to six hours. If a pure culture of pneumococcus is desired, the mouse may be autopsied, and its brain or heart blood cultured.

* * *

Early in 1937, the State Director of Health, Dr. Walter H. Hartung, formulated tentative plans for a pneumonia program in Ohio. Recognizing the difficulties of accurate typing, and the wastefulness of the indiscriminate use of specific serum, the first step taken in this program consisted of establishing facilities for the training of competent technical assistants. With the cooperation of the Department of Internal Medicine of the Cincinnati General Hospital, a training school for such assistants was established at that hospital. Candidates were selected with a

From the Department of Internal Medicine, University of Cincinnati Medical School.

view to placing typing facilities at representative points throughout the state. These classes are to continue during the first part of 1938. The course of instruction, the schedule of which appears below, is designed to be fairly formal, so that each student may acquire a maximum of experience during the week.

SCHEDULE OF TRAINING COURSE

All sessions are to be held on the fourth floor of Pavilion J of the Cincinnati General Hospital.

Monday Morning

9:00—10:00 Introductory Talk.
10:00—12:00 Demonstration of Neufeld technic with pure culture by instructor.
Typing of pure culture by students, each setup to be confirmed.
Repeat demonstration with "good sputum".
Typing of 3 sputa.

Monday Afternoon

1:00— 5:30 Demonstration of special technic.
Inoculation of mice.
Autopsy of previously injected mouse.
1. Peritoneal puncture
2. Peritoneal washing
3. Heart's blood culture
4. Brain culture

Tuesday Morning

Typing of mouse exudates and subcultures (10)

Tuesday Afternoon

1:00— 5:30 Typing of 6 specimens.

Wednesday Morning

Typing of 8 sputa with mixed infections.
Inoculation of Avery broth.

Wednesday Afternoon

Practice in "timed" typing.
Typing of 8 sputa.

Thursday

Morning and Afternoon
Typing of 16 sputa, including mouse inoculations.

Friday

Examination.
Independent work—eight specimens, results to be criterion of "typer's" proficiency.

In our two years of experience at the Cincinnati General Hospital, we have found that successful results in serum therapy are absolutely dependent on accurate typing. In turn, it has been found that a rigid system of instruction is necessary to qualify internes and house officers for accurate typing. Only by careful typing of many unknown specimens, with checking by an expert, can a technician be trained to do reliable and dependable typing. This conviction has been supported too frequently to require argument. The institution of this program is not intended to discourage individual typing in offices or private laboratories. But since rapid and accurate typing is such a fundamental part of the successful use of specific serum, the training of competent typers seems an essential requisite in any pneumonia program, and one which every physician or public health agency should support wholeheartedly.

Technicians who attended the training course at Cincinnati General Hospital during December, 1937, were listed in the January, 1938, issue of *The Ohio State Medical Journal*, page 92.

The following technicians completed the course given January 17-21:

County

Athens—Ruth Fetzer, Sheltering Arms Clinical Laboratory, Athens.

Cuyahoga—Mrs. Lucile Guinn, Lakewood City Hospital, Lakewood.

Defiance—Margaret Fauster, Defiance Hospital, Defiance.

Hocking—Lucille Miller, Cherrington Hospital, Logan.

Lucas—Technician, St. Vincent's Hospital, Toledo.

Muskingum—Sister Mary Berard, Good Samaritan Hospital, Zanesville.

Stark—Edna Rigdon, City Hospital, Massillon.

Trumbull—Mary Lou Helm, City Hospital, Warren.

Excellent Program Presented at First District Meeting at Hamilton

A meeting of the First Councilor District of the Ohio State Medical Association was held at the Woodrow Wilson Junior High School, Hamilton, Wednesday afternoon and evening, January 19.

At the afternoon session, the following papers were presented: "Diabetes; Diagnosis and Treatment", by Dr. Henry J. John, Cleveland; "Artificial Fever Therapy", by Dr. Walter M. Simpson, Dayton, and "Treatment of Wounds", by Dr. Mont R. Reid, Cincinnati.

Dr. A. Graeme Mitchell, Cincinnati, spoke on "What I Do Not Know About Endocrines", and Dr. D. M. Masson, Rochester, Minnesota, discussed "Medical Emergencies", at the evening session.

The program was arranged by Dr. Parke G. Smith, Councilor for the First District, and an executive committee consisting of Dr. Malcolm O. Cook, Hamilton, chairman; Dr. Lloyd B. Johnston, Cincinnati; Dr. Clifford Foor, Hillsboro; Dr. David F. Gerber, Middletown, and Dr. Dan Skinner, Hamilton.

ADVICE FOR PHYSICIANS REGARDING FEDERAL AND STATE TAX RETURNS AND PAYMENTS, INCLUDING U. S. INCOME TAX

DURING the next few months, most Ohio physicians, along with other taxpayers, must file certain Federal and State tax returns and pay certain taxes.

These taxes, with the last date for filing or payment, include: Federal Income Tax Information Return, listing salaries and wages paid during 1937, with the Commissioner of Internal Revenue, Washington, D. C., February 15; Ohio Personal Property Tax Return, with County Auditor, between February 15 and March 31; Federal Income Tax Return for year 1937 and first quarterly payment, with the District Collector of Internal Revenue, March 15; Social Security (Old Age Benefits) Tax, affecting all employers of one or more persons, with the District Collector of Internal Revenue, first quarterly information return and tax for January, February and March, 1938, April 30; State Unemployment Compensation Tax (for employers of three or more persons) Employers' Contribution Report and Tax, with the Unemployment Compensation Commission, Columbus, the last day of each month for payroll of preceding month; Federal Unemployment Compensation Tax (for employers of eight or more persons), with District Collector of Internal Revenue, January 31, 1938, for calendar year 1937.

Based on authoritative information obtained from Federal and State tax officials, *The Journal* presents herewith detailed provisions of the tax laws especially affecting physicians and suggestions as to procedure, to assist members of the Ohio State Medical Association who are required to file the above returns and pay Federal and State taxes.

FEDERAL INCOME TAX

COLLECTORS of Internal Revenue in Ohio have mailed to all taxpayers of record, blanks for making Federal Income Tax returns for the calendar year 1937.

These blanks, properly filled out, must be filed with the collector of the district in which the taxpayer resides, on or before March 15, 1938.

Any physician required to make a return, but who fails to receive an income tax blank, should apply to the Collector of Internal Revenue for his district.

Internal revenue districts of Ohio, together with the name and address of the collector, and the counties comprising each district, follow:

For the Columbus District (Ohio 11th) Collector of Internal Revenue Harry F. Busey, Federal Building, Water and Gay Sts., Columbus, Ohio; comprising the following counties:

Adams, Athens, Coshocton, Delaware, Fairfield, Franklin, Gallia, Guernsey, Hocking, Jackson, Knox, Lawrence, Licking, Madison Marion, Meigs, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Ross, Scioto, Union, Vinton and Washington.

For the Cleveland District (Ohio 18th) Collector of Internal Revenue Frank F. Gentsch, 262 Federal Building, Cleveland, Ohio; comprising the following counties:

Ashland, Ashtabula, Belmont, Carroll, Columbiana, Cuyahoga, Geauga, Harrison, Holmes, Jefferson, Lake, Lorain, Mahoning, Medina Monroe, Portage, Richland, Stark, Summit, Trumbull, Tuscarawas and Wayne.

For the Cincinnati District (Ohio 1st) Collector of Internal Revenue Thomas J. Connor, Customs Building, Cincinnati, Ohio; comprising the following counties:

Brown, Butler, Clark, Clermont, Clinton, Fayette, Greene, Hamilton, Highland, Miami, Montgomery, Preble and Warren.

For the Toledo District (Ohio 10th) Collector of Internal Revenue Charles H. Graves, Toledo, Ohio; comprising the following counties:

Allen, Auglaize, Champaign, Crawford, Darke, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Logan, Lucas, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Shelby, Van Wert, Williams, Wood and Wyandot.

INFORMATION RETURNS

In addition, every person making payments of salaries, wages, interest, rents, commissions, or other fixed or determinable income of $1,000 or more during the calendar year 1937, to a single person, a partnership, or a fiduciary, or $2,500 or more to a married person, is required to make a return on Forms 1096 and 1099 showing the amount of such payments and the name and address of each recipient. These forms may be obtained from any District Collector of Internal Revenue on request.

Salaries of office assistants and other employes coming under this provision must be reported, also office rent, unless paid to a corporation.

Such returns covering the calendar year 1937 must be forwarded to the Commissioner of In-

ternal Revenue, Sorting Section, Washington, D. C., in time to be received not later than February 15, 1938.

BLANKS AND FORMS

The procedure for filling out income tax blanks and computing the tax for the past year is in accordance with the Revenue Act of 1936, and except for some minor changes in the form of the blank, is substantially the same as last year.

Physicians and other professional men, are required to use Form 1040 in submitting returns, regardless of the amount of net income. The sole exception is a physician not in private practice, receiving a salary, whose net income is less than $5,000. In such cases, Form 1040-A should be used.

Income tax returns must be filed in duplicate, and a penalty of $5 is provided for failure to file a duplicate return. The duplicate will be made available by the Internal Revenue Department to the State Tax Commission for the purpose of checking personal property tax returns.

PROCEDURE FOR PHYSICIANS

Following is a detailed analysis of the procedure physicians should follow in filling out blanks for their 1937 income and an example of how computations should be made:

Every physician whose net income for 1937 was $1,000 or more, if single, and $2,500 or more, if married, must file an income tax return on or before March 15, 1938. He also must file a return if his gross income was $5,000 or more, irrespective of marital status and net income.

All groups, joint ventures and other incorporated organizations must file returns as partnerships or corporations. Such return must list the names and addresses of the individuals who would be entitled to share in the net income if distributed and the amount of the distributive share of each individual. The members of such groups or corporations must report their distributive shares as their own income.

In order to expedite checking of returns, and eliminate the possibility of unnecessary correspondence or investigations, physicians are urged to fill out all schedules in their returns.

GROSS INCOME

Gross income includes gains, profits and income derived from professional services, business activities, salaries, wages, sales, dealings in, or exchange of real or personal property, rents or royalties, dividends and interest, bonuses received as compensation, money collected on old accounts charged off in precvious years as "bad debts", and funds received from all other sources.

PERSONAL EXEMPTIONS

If married and living with wife, or the head of a family, for the entire year, an exemption of $2,500 is allowed; if single and not a head of a family, an exemption of $1,000 is permitted, as credit against net income for the purposes of the normal tax and the surtax.

Credit of $400 is permitted for each dependent under 18 years of age or each physically or mentally handicapped dependent regardless of age. The credit is not allowed in the case of a dependent minor over 18 years of age even if such minor is attending school.

The names and relationships of dependents for whom a credit is taken must be shown on Schedule I, page 4 of the return.

In case of a change during the calendar year of the status of the physician in so far as it affects the personal exemption or credit for dependents, the personal exemption and credit should be apportioned in accordance with the number of months after such change. Authority for prescribing rules and regulations for such apportionment is given to the Commissioner of Internal Revenue.

A husband and wife living together shall receive but one personal exemption. The amount of such personal exemption is, as previously stated, $2,500. If such husband and wife make separate returns, the personal exemption may be taken by either or divided between them.

ITEMS NOT REPORTABLE AS INCOME

The following items **should not** be included in gross income since they are **exempt** to Federal income tax:

Amounts received under a life insurance contract paid by reason of the death of the insured; whether in a single sum or in installments (but if such amounts are held by the insurer under an agreement to pay interest thereon, the interest payments shall be included in gross income).

Amounts received (other than amounts paid by reason of the death of the insured and interest payments on such amounts and other than amounts received as annuities) under a life insurance or endowment contract, but if such amounts (when added to amounts received before the taxable year under such contract) exceed the aggregate premiums or consideration paid (whether or not paid during the taxable year) then the excess shall be included in gross income. Amounts received as an annuity under an annuity or endowment contract shall be included in gross income; except that there shall be excluded from gross income the excess of the amount received in the taxable year over an amount equal to 3 per cent of the aggregate premiums or consideration paid for such annuity (whether or not paid during such year), until the aggregate amount excluded from gross income equals the aggregate premiums or consideration paid for such annuity.

Gifts (not made as a consideration for service

rendered) and money and property acquired by bequest, devise, or inheritance (but the income derived from such property is taxable and must be reported).

Interest upon (1) the obligations of a State, Territory, or any political subdivision thereof, or the District of Columbia, or United States possessions; or (2) obligations issued under the provisions of the Federal Farm Loan Act or under such act as amended; or (3) the obligations of the United States; or (4) obligations of instrumentalities of the United States (other than obligations issued under Federal Farm Loan Act or under such Act as amended), such as Federal Farm Mortgage Corporation bonds, Home Owners' Loan Corporation bonds, etc. The interest on United States Savings Bonds and Treasury Bonds, owned in excess of $5,000, and on obligations of instrumentalities of the United States (other than obligations issued under Federal Farm Loan Act or under such Act as amended) is subject to surtax if the surtax net income is over $4,000.

Amounts received through accident or health insurance or under workmen's compensation acts, as compensation for personal injuries or sickness plus the amount of any damages received, whether by suit or agreement, on account of such injuries or sickness.

Compensation paid by a State or political subdivision thereof to its officers or employees for services rendered in connection with the exercise of an essential governmental function.

Amounts received as earned income from sources without the United States (except amounts paid by the United States or any agency thereof) by an individual citizen of the United States who is a bona fide nonresident for more than 6 months during the taxable year. The taxpayer in such a case may not deduct from his gross income any amount properly allocable to or chargeable against the amount so excluded from his gross income.

DEDUCTIBLE ITEMS

In computing net income, the following items may be deducted by a physician from gross income:

Office Rental—If a physician pays rent to another person for office space, he may deduct such amount. If he owns his own home and maintains an office in it, he cannot claim deduction for office rent. However, he is entitled to claim depreciation on that portion of the property occupied as an office.

Automobile—The cost of repair and upkeep of an automobile, including gasoline and oil, used in professional visits may be deducted. That part of the salary paid to a chauffeur and attributable to time spent in driving his employer on professional calls, may be deducted. Sums spent for taxi hire, car fare, etc., while on professional calls, may be deducted.

Loss on an automobile used in professional business through depreciation may be deducted. The depreciation which should be deducted annually is figured by dividing the cost price of the machine by the number of years of its usefulness. If a physician has one automobile which is use exclusively in professional business, he may deduct the full depreciation each year. If the machine is used only partly in professional business the deductible depreciation should be computed on the basis of the amount of time the car is used for professional purposes. If a physician possesses two cars, each of which is used partly in professional business, the deductible depreciation on each car should be computed on the basis of the amount of time each car is used for professional purposes. In other words, if an automobile is used only partly for business purposes, depreciation may be deducted only on a proportionate part thereof, the amount of depreciation depending on the amount of time the machine is used in professional business.

It is suggested that physicians be prepared to substantiate claims for deductions from gross income for professional use of automobiles in case income tax officials should call on them for written records to show the mileage traveled by them in connection with professional practice, or to prove just what part of their automobile maintenance expense was a professional expense, and therefore deductible.

Professional Dues—Dues paid to professional associations to which, in the interest of his profession, the physician belongs, may be deducted. Expenses incurred in taking graduate courses have been held not to be deductible.

Traveling Expenses—Traveling expenses necessarily incurred by a physician on professional calls and in attending medical conventions for a professional purpose are deductible from gross income.

Salaries and Wages—Deductions are permitted for the salaries or wages of nurses, laboratory workers, technicians, assistants, stenographers or other clerical workers in a physician's office so long as their duties are connected with professional work; also for wages paid maids, janitors, etc., for services rendered in connection with professional practice.

Medicines, Supplies, etc.—Cost of medicines used in the office to treat patients, medicine dispensed, bandages, laboratory materials, chemicals, and other supplies "consumed in the using" and necessary to operate the office may be deducted.

Equipment, Furniture, Library, etc.—Cost of surgical instruments and laboratory appliances of more or less permanent value may not be deducted but a percentage of the purchase price may be deducted annually under a depreciation account. The same rule applies to office furniture and books purchased for the physician's office library. If improvement to offset obsolescence and wear and tear or injury has been made and deduction for the cost claimed elsewhere in the return, claim should not be made for depreciation.

General Office Expenses.—The cost of telephone, telegrams, heat, light, water, etc., used in professional service is deductible. Physicians who keep current magazine and newspapers in their waiting rooms for the benefit of their patients, may deduct this item as a business expense. The cost of professional journals for the physician's own use is also a deductible item.

Debts—If the physician's books are kept according to the "Cash Receipts and Disbursements" system, he may not charge off any unpaid debt because he is then only reporting as gross income those accounts which have proved to be good. Bad accounts have not been reported and are therefore not deductible.

If books are kept on an "Accrual Basis" (where expense is actually incurred and payable even though not yet paid, or income earned although not yet collected) it is permissible to charge off all debts which have been definitely ascertained to be worthless during the fiscal year covered by the report.

The physician using this latter system must be careful to include in gross income bad debts which have been charged off in previous years but collected during the calendar year for which the return is filed.

Taxes and Licenses—All state and county taxes, except those assessed against local benefits of a kind tending to increase the value of the property assessed and those imposed upon the taxpayer upon his interest as shareholder of a corporation which are paid by the corporation without reimbursement from the taxpayer, are deductible.

Sales tax payments may be deducted. A reasonable allowance will be permitted in proportion to the physician's income. Should the claimed exemption appear too large, however, the burden of proof falls upon the taxpayer, and he may be called up to produce purchase receipts to substantiate his claim. Sales tax coupons are not considered sufficient evidence.

All Federal taxes except income, war-profit and excess-profit taxes are deductible, including Federal excise taxes collected direct from the consumer or purchaser.

Federal Old Age Benefits and Unemployment Compensation taxes paid by employers under the Social Security Act are proper deductions in making income tax returns. Such taxes are deductible on returns for the taxable year in which they are accrued or paid, depending upon the method of accounting employed by the taxpayer. However, Federal Old Age Benefits payroll deductions from employes' wages are not proper deductions from individual Federal income tax returns. The reason for this latter distinction is that the individual employee at a future date will have returned to him in the form of pensions the money which is deducted from his current wages.

The Ohio Gasoline Tax is deductible to the extent of three cents per gallon. If a physician has already deducted the cost of gasoline used in making professional calls as automobile expense, he cannot of course make an additional deduction of three cents per gallon for gasoline so used. However, he may deduct that amount on gasoline purchased for other than professional use.

All license fees which the physician is required to pay are deductible, including the narcotic tax, automobile license tag fee, local occupational taxes, taxes on club dues, etc.

Interest—Amounts paid out as interest upon indebtedness (except interest paid to carry nontaxable securities) are deductible.

Losses by Fire and Theft—Loss of and damage to a physician's equipment by fire, theft, or other cause, not compensable by insurance or otherwise recoverable, may be computed as a business expense, and is deductible, provided evidence of such loss or damage can be produced. Such loss or damage is deductible, however, only to the extent to which it has not been made good by repair and the cost of the repair is claimed as a deduction.

Insurance Premiums—Premiums paid for insurance against professional losses are deductible. This includes insurance against damages for alleged malpractice, against liability for injuries to a physician's automobile while in use for professional purposes, and against loss from theft of professional equipment, and damage to or loss of professional equipment by fire or otherwise. Premiums paid on life insurance are not deductible.

Legal Expenses—Expense incurred in the defense of a suit for alleged malpractice is deductible as business expense. However, expense incurred in the defense of a criminal action is not deductible.

Contributions, Gifts, etc.—It is permissible to deduct from gross income contributions made to charitable, religious, educational and scientific organizations, no substantial part of the activi-

ties of which is carrying on propaganda, or otherwise attempting to influence legislation, to an aggregate amount not to exceed 15 per cent of the net income, exclusive of such contributions.

NORMAL TAX RATE

The normal tax rate on 1937 income is 4 per cent on all net income in excess of exemptions and credits.

SURTAX RATES

In addition to the normal tax, a surtax is levied on surtax net income, that is, net income less the personal exemption and the credit for dependents, as follows:

Surtax net income of $4,000, no surtax; $4,000 to $6,000, 4 per cent; $6,000 to $8,000, 5 per cent; $8,000 to $10,000, 6 per cent; $10,000 to $12,000, 7 per cent; $12,000 to $14,000, 8 per cent; $14,000 to $16,000, 9 per cent; $16,000 to $18,000, 11 per cent; $18,000 to $20,000, 13 per cent; $20,000 to $22,000, 15 per cent; $22,000, to $26,000, 17 per cent; $26,000 to $32,000, 19 per cent; $32,000 to $38,000, 21 per cent; $38,000 to $44,000, 24 per cent; $44,000 to $50,000 27 per cent; $50,000 to $56,000, 30 per cent; $56,000 to $62,000, 33 per cent; $62,000 to $68,000, 36 per cent; $68,000 to $74,000, 39 per cent; $74,000 to $80,000, 42 per cent; $80,000 to $90,000, 45 per cent; $90,000 to $100,000, 50 per cent; $100,00 $150,000, 52 per cent; $150,000 to $200,000, 53 per cent; $200,000 to $300,000, 54 per cent; $300,000 to $400,000, 55 per cent; $400,000 to $500,000, 56 per cent; $500,000 to $750,000, 57 per cent; $750,000 to $1,000,000, 58 per cent; $1,000,000 or more, 59 per cent.

EARNED INCOME CREDIT

For purposes of the normal tax, an earned income credit is allowed by means of a deduction from net income of an amount equal to 10 per cent of the earned net income. If the taxpayer's net income is not more than $3,000, his entire net income is considered to be earned net income. If his net income is more than $3,000, his earned net income shall not be considered less than $3,000 but in no case shall the earned net income be considered more than $14,000.

HOW COMPUTATIONS ARE MADE

An example of how computations are made is given here for the information of physicians. The figures used in the following tabulations may appear out of proportion to the actual income of the average physician during 1937. However, they are used merely to illustrate how the normal and surtax rates should be applied.

If a married physician with no dependents and who rents his home and office had a gross income during 1937 of $15,000 and ordinary expenses, he should submit the following data on his return and compute his tax as follows:

Gross Income

Income from professional services		$12,000.00
Income from other sources:		
Rent from apartment	$1,500.00	
Taxable interest, dividends	1,500.00	
	$3,000.00	3,000.00
Gross Income		$15,000.00

Deductions

Depreciation of office furniture, etc.	$ 400.00	
Salaries and wages for office help	1,500.00	
Telephone, heat, light, etc.	400.00	
Automobile cost and depreciation	800.00	
Drugs, bandages, medicines, etc.	2,500.00	
Traveling expenses to medical meetings	300.00	
Office rent	800.00	
Dues, insurance	200.00	
Miscellaneous expense	100.00	
Business expenses	$7,000.00	
State Sales Tax	75.00	
Old age benefits tax	15.00	
Gasoline tax	10.00	
Taxes on apartment	400.00	
Interest on mortgage, overhead, etc.	300.00	
Total deductible expenses		$ 7,800.00
Net income (gross income, less deductible expenses)		$ 7,200.00

Computations

Surtax net income (net income less personal exemption $7,200.00 less $2,500.00)	$4,800.00
Earned net income (earned income less business expenses, $12,000.00 less $7,000.00)	$5,000.00
Earned income credit (10% of earned net income, 5,000.00)	$ 500.00
Income subject to normal tax (net income less personal exemptions and earned income credit; $7,200.00 less $2,500.00 and $500.00)	$4,200.00
Normal tax (4% of $4,200.00)	$ 168.00
Income subject to surtax (surtax net income in excess of $4,000.00)	$ 700.00
Surtax (4% of $700.00)	28.00
Total tax (normal tax plus surtax)	$ 196.00

EXTENSION OF TIME FOR FILING RETURNS

Collectors of Internal Revenue are authorized to grant reasonable extensions of time for filing

income tax returns. Applications for extensions of time should be addressed to the collector for the district in which the physician files his return, and must contain a full recital of the causes for the delay. Except in the cases of taxpayers who are abroad, no extension for filing income tax returns may be granted for more than six months.

OHIO PERSONAL PROPERTY TAX

Returns under the Ohio Personal Property Tax Law must be made between February 15 and March 31, annually.

All tangible and intangible personal property (not real property) in possession of a physician on January 1, 1938, which is subject to taxation under the Ohio law, should be listed on the return which should be filed with the county auditor between those dates.

Such returns should be made in duplicate. The so-called intangible tax statutes are intricate and complicated so each physician having taxable personal property for listing should obtain competent advice in case of doubt as to the meaning of any of the provisions of the law.

One of the complicated provisions of the tax law is that involving the listing of credits which are taxable at 3 mills on the dollar and which involves the computation of accounts receivable.

As defined in Section 5327 of the law, credits "mean the excess of the sum of all current accounts receivable and prepaid items used in business when added together estimating every such account and item at its true value in money, over and above the sum of current accounts payable of the business, other than taxes and assessments".

The same section states that "current accounts includes items receivable or payable on demand or within one year from the date of inception, however evidenced".

As the first step in making his return under the section relating to credits, a physician should estimate by his best judgment the Actual Value of his current accounts receivable—the amount that can probably be collected.

In listing his current accounts receivable, the physician should note after each account what he considers the value of the account. If he believes the account can be collected in full, it should be listed at its full face value. Otherwise, it should be listed at 75%, 50%, 25%, 10%, etc., of its full face value, or of "no value" in case that is considered the "actual value" of the account. The total of these estimates is the total to be entered as "current accounts receivable" and used in computing credits.

This procedure permits the physician to charge off bad debts since in his 1938 return he would be permitted to return as of "no value" accounts receivable which he listed in 1937 but no part of which was collected during the past year. Moreover, it permits a physician to depreciate the actual value of accounts returned in 1937 but which have decreased in actual value during the past year.

OLD AGE BENEFITS TAX

The Old Age Benefits Tax is payable by every physician who employs one or more persons in his office. Amounting to one per cent on the first $3,000 of each employees wage paid by the employer and a like amount deducted from the wages of each employee, the tax was payable monthly, on Form SS 1, during 1937, and an information return, Form SS-2, listing taxable wages during the period, had to be filed quarterly. This procedure has been changed for 1938. The tax return and informational return have been combined in one report to be filed quarterly. The tax must be paid and the return filed prior to April 30, for the months of January, February and March, 1938, in the office of the District Collector of Internal Revenue.

UNEMPLOYMENT COMPENSATION TAX

Under the Ohio Unemployment Compensation Law, physicians who employ three or more persons in 1938, must file an "Employer's Contribution Report" with the Unemployment Compensation Commission, Columbus, on or before the last day of the month immediately succeeding the month covered by the report. The tax, which must accompany the return, amounts to 2.7 per cent of the monthly payroll.

Employers of eight or more persons, under the Federal Unemployment Compensation Law, must have filed with the District Collector of Internal Revenue, prior to January 31, 1938, a report of wages paid during 1937. The tax is 2 per cent, less a credit of the amount paid to the State Unemployment Compensation Commission. In other words, 90 per cent of the Unemployment Compensation Tax of employers of eight or more persons will be paid to the State and 10 per cent to the Federal Government.

Second District Meeting on March 30 at Dayton; Straith and Bland Speakers

Dr. D. W. Hogue, Springfield, Councilor for the Second District of the Ohio State Medical Association, is making plans for a Second District meeting at Dayton on Wednesday, March 30. Invitations to appear on the program have been accepted by Dr. C. L. Straith, Detroit, and Dr. P. Brooke Bland, Philadelphia. Further details concerning the meeting will be announced later.

PROGRAM FOR REGIONAL POSTGRADUATE LECTURES WHICH WILL BE HELD AT ELKS' HOME, CHILLICOTHE, OPENING FEB. 3

COURSE No. 1 of the Ohio State Medical Association Regional Postgraduate Lectures, a five-year project, will be presented at the **Elks' Home, Chillicothe, beginning Thursday evening, February 3,** and on the following Thursday evenings thereafter: February 17, March 3, March 17, March 31, April 14, April 28 and May 19.

Counties comprising **Region B**, for which this course is being given, are: Adams, Athens, Brown, Clermont, Clinton, Fairfield, Fayette, Franklin, Gallia, Highland, Hocking, Jackson, Lawrence, Meigs, Pickaway, Pike, Ross, Scioto and Vinton. All members of the State Association, particularly those in the above-named counties, are invited and eligible to attend the lectures. There will be no registration fee. Admission will be by 1938 State Association membership card.

SIMILAR TO NORTHWEST OHIO COURSE

The course for the Chillicothe lectures is patterned after the series presented in Northwestern Ohio, Region A, alternating at Findlay and Defiance, which opened October 21 and will close February 3. These meetings have been enthusiastically received by physicians practicing in that section of the state. The average attendance of approximately 150 clearly indicates that members of the profession are eager to hear practical talks on important medical subjects by experienced and authoritative clinicians.

As in Region A, the course in Region B will consist of eight sessions, two lectures each evening. The speakers will be limited to 45 minutes each, and a general discussion period will close each session. The Sub-Committee on Regional Post Graduate Lectures of the Committee on Education has requested speakers selected for the Chillicothe series to make their talks, practical and informative, emphasizing diagnosis and treatment and designed to be of special interest to physicians in general practice. Each of the lecturers is known for his ability in his particular field. The committees sponsoring this important educational project of the State Association are hopeful that the physicians of South-Central Ohio will recognize the fine opportunity which is afforded them to keep their medical knowledge up to date.

Local arrangements for the Postgraduate Lectures at Chillicothe are in charge of Dr. A. E. Merkle, secretary of the Ross County Medical Society, general chairman of the Regional Committee on Local Arrangements.

FIRST SESSION ON FEBRUARY 3

Officials of the State Association feel that the inauguration of the Regional Postgraduate Lecture program was one of the most progressive steps ever undertaken by organized medicine in Ohio. They are well-pleased with the support given the project in Northwestern Ohio, and anticipate that the profession in South-Central Ohio will respond as well. If the present interest in this postgraduate program continues, it is expected that the course will be presented later in other conveniently located sections of the state.

The Chillicothe course will be opened Thursday evening, February 3, at the Elks' Home with lectures by Dr. Roy W. Scott, Cleveland, on "Arteriosclerosis", and by Dr. Robert E. Barney, Cleveland, on "Diagnosis and Treatment of Early Syphilis". The initial meeting will be attended by several prominent State Association officials, including Dr. J. H. J. Upham, Columbus, President of the American Medical Association; Dr. John B. Alcorn, Columbus, President of the Ohio State Medical Association; Dr. Clyde L. Cummer, Cleveland, former President of the State Association and chairman of the Committee on Education; Dr. Parke G. Smith, Cincinnati; Dr. Edmund R. Brush, Zanesville; Dr. I. P. Seiler, Piketon, and Dr. C. C. Sherburne, Columbus, Councilors for the Eighth, Ninth and Tenth Districts.

The meetings will be held at the Elks' Home, Chillicothe, and will begin at 7 o'clock. Dr. Merkle, Chillicothe, general chairman of the Regional Committee on Arrangements, will preside at all sessions. The complete program for the course in Region B follows:

THURSDAY, FEBRUARY 3, 1938

1. "Arteriosclerosis", by Roy W. Scott, M.D., Cleveland.



Dr. Scott is professor of clinical medicine, Western Reserve University, School of Medicine; physician-in-chief, Cleveland City Hospital; member, Association of American Physicians, American Society for Clinical Research, board of directors, American Heart Association, American Physiological Society, Central Society for Clinical Research and American Society for Pharmacology and Experimental Therapeutics. Dr. Scott is a graduate of Western Reserve University School of Medicine, 1913.

2. "Diagnosis and Treatment of Early Syphilis", by Robert E. Barney, M.D., Cleveland.



Dr. Barney is a graduate of the University of Michigan Medical School, 1921; formerly instructor in dermatology and syphilology at the University of Michigan Medical School and Western Reserve University School of Medicine; head of the department of dermatology and syphilology, St. Luke's Hospital, Cleveland; member, American Dermatological Association; diplomate, American Board of Dermatology and Syphilology.

THURSDAY, FEBRUARY 17, 1938

3. "Pneumonia", by M. A. Blankenhorn, M.D., Cincinnati.



Dr. Blankenhorn is a graduate of Western Reserve University School of Medicine, Cleveland, 1914; professor of medicine, University of Cincinnati College of Medicine; director, department of internal medicine, Cincinnati General Hospital; member, Association of American Physicians; Central Society for Clinical Research, American Society for Clinical Investigation, American Society for Experimental Pathology.

4. "Diabetes", by Cecil Striker, M.D., Cincinnati.



Dr. Striker is a graduate of the University of Cincinnati College of Medicine, 1921; fellow, American College of Physicians; instructor in medicine, University of Michigan Medical School, 1924-25; chairman, Council on Diabetes, Cincinnati Public Health Federation; diplomate, American Board of Internal Medicine; member, Central Society for Clinical Research; attending physician, Jewish Hospital, Cincinnati; member, Committee on Education, Ohio State Medical Association.

THURSDAY, MARCH 3, 1938

5. "Intestinal Obstruction", by John F. Beachler, M.D., Piqua.



Dr. Beachler is a graduate of the Ohio State University College of Medicine, 1913; former resident house surgeon, Mt. Carmel Hospital, Columbus; fellow of the American College of Surgeons; member of staff, Memorial Hospital, Piqua, and Wilson Memorial Hospital, Sidney.

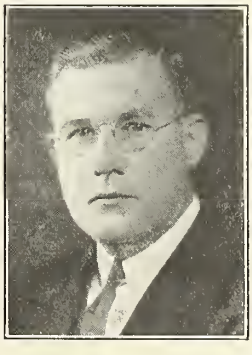
6. "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by James B. Nelson, M.D., Youngstown.



Dr. Nelson is a graduate of the University of Louisville School of Medicine, 1911; fellow of the American College of Surgeons; gynecologist, St. Elizabeth Hospital, Youngstown; former president, Mahoning County Medical Society. Dr. Nelson trained under Dr. Irvin Abell, clinical professor of surgery, University of Louisville School of Medicine, and president-elect of the American Medical Association.

THURSDAY, MARCH 17, 1938

7. "Tuberculosis in Infancy", by Edward A. Wagner, M.D., Cincinnati.



Dr. Wagner is a graduate of the Medical College of Ohio, 1909; associate professor of pediatrics, University of Cincinnati College of Medicine; member of the American Academy of Pediatrics; pediatrician-in-chief, Good Samaritan Hospital; attending pediatrician, Cincinnati General Hospital; associate pediatrician, Children's Hospital; consulting pediatrician, Christ Hospital.

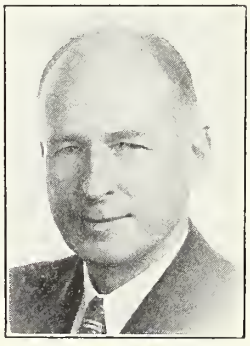
8. "Prophylaxis and Treatment of More Common Contagious Diseases", by James G. Kramer, M.D., Akron.



Dr. Kramer is a graduate of Western Reserve University School of Medicine, 1915; hospital training, Cleveland Lakeside; Massachusetts General; Boston City; and Babies' Dispensary and Hospital, Cleveland; member, American College of Physicians and American Academy of Pediatrics; visiting pediatrician, Akron Children's Hospital and St. Thomas Hospital, Akron; pediatrician, Summit County Children's Home.

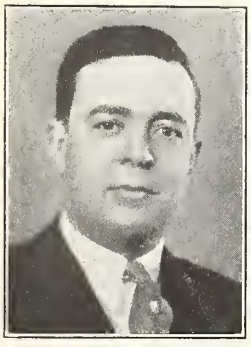
THURSDAY, MARCH 31, 1938

9. "Common Psychoses", by Charles W. Stone, M.D., Cleveland.



Dr. Stone is a graduate of Johns Hopkins University School of Medicine, 1905; associate clinical professor of nervous diseases, Western Reserve University School of Medicine; department head in neuropsychiatry, Cleveland City Hospital; associate neurologist, Lakeside Hospital; visiting neurologist, St. Alexis Hospital; fellow, American College of Physicians; member, American Psychiatric Association and Central Neuropsychiatric Association; former Fifth District Councilor, former President, 1928-1929, and chairman of Committee on Public Relations and Economics, Ohio State Medical Association; member of the House of Delegates, American Medical Association.

10. "Cancer of the Breast", by Edward J. McCormick, M.D., Toledo.



Dr. McCormick is a graduate of St. Louis University School of Medicine, 1915; director of surgery, Lucas County Hospital; fellow, American College of Surgeons; member, American Society for the Advancement of Science; surgeon, St. Vincent's Hospital and St. Anthony's Orphanage, Toledo; visiting surgeon, Toledo Hospital; professor of biology, St. John's College, 1919-21; past president, Academy of Medicine of Toledo and Lucas County; past chairman, Surgical Section, and Fourth District Councilor, Ohio State Medical Association.

THURSDAY, APRIL 14, 1938

11. "Prenatal and Postnatal Care", by Walter W. Brand, M.D., Toledo.



Dr. Brand is a graduate of Jefferson Medical College of Philadelphia, 1894; fellow of the American College of Surgeons; director of obstetrics, Women's and Children's Hospital, Toledo; vice-president, Hospital Obstetric Society of Ohio.

12. "Infections of the Urinary Tract", by Thomas P. Shupe, M.D., Cleveland.



Dr. Shupe is a graduate of Western Reserve University School of Medicine, Cleveland, 1911; urologist to Lutheran Hospital; visiting urologist, private ward service, University Hospitals and St. Luke's Hospital; member American Urological Association, Cleveland Urological Society and the American Association of Genito-Urinary Surgeons.

THURSDAY, APRIL 28, 1938

13. "Angina Pectoris and Coronary Thrombosis", by Frank C. Clifford, M.D., Toledo.



Dr. Clifford is a graduate of St. Louis University School of Medicine, 1921; fellow, American College of Physicians; member, American Heart Association; cardiologist, Lucas County Hospital, Crippled Children's Hospital, Mercy Hospital, Robinwood Hospital and St. Vincent's Hospital, Toledo; former editor, Bulletin of the Academy of Medicine of Toledo and Lucas County.

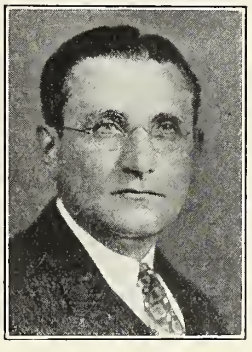
14. "Fungous and Pyogenic Infections of the Skin", by Howard J. Parkhurst, M.D., Toledo.



Dr. Parkhurst is a graduate of Western Reserve University School of Medicine, 1918; associated with Dr. Fred Wise, New York, as office assistant, 1919-21; member, Section of Dermatology, American Medical Association, American Dermatological Association and Chicago Dermatological Society; charter member and past president, Cleveland Dermatological Society, Detroit Dermatological Society, and charter diplomate of the American Board of Dermatology and Syphilology; dermatologist to the Flower, Woman's and Children's, Toledo, Mercy, St. Vincent's and Lucas County hospitals, Toledo.

THURSDAY, MAY 19, 1938

15. "Arthritis: Medical Aspects", by H. B. Weiss, M.D., Cincinnati.



Dr. Weiss is a graduate of University of Cincinnati College of Medicine, 1915; attending physician, Jewish, General and Chronic Disease Hospitals, Cincinnati; associate professor of medicine, University of Cincinnati College of Medicine; member, American College of Physicians, American Heart Association.

16. "Arthritis: Orthopedic Aspects", by Joseph A. Freiberg, M.D., Cincinnati.



Dr. Freiberg is a graduate of University of Cincinnati College of Medicine, 1923; associate professor of orthopaedic surgery, University of Cincinnati College of Medicine; assistant director, orthopaedic service, Cincinnati General Hospital; attending orthopaedic surgeon, Jewish, Children's, Holmes Hospitals; consulting orthopaedic surgeon, Hamilton County Chronic Disease Hospital; member, American Orthopaedic Association, American Academy of Orthopaedic Surgery, Clinical Orthopaedic Society; fellow, American College of Surgeons.

Final Postgraduate Session In Northwestern Ohio on February 3

The concluding session of the first year's course of Regional Postgraduate Lectures in Northwestern Ohio will be held at the High School Auditorium, Defiance, Thursday evening, February 3, at 7 o'clock. The speakers will be: Dr. John W. Means, Columbus, "Cancer of the Breast", and Dr. Claude B. Norris, Youngstown, "Fungous and Pyogenic Infections of the Skin."

Speakers at the January meetings were: January 6—Defiance—Dr. A. B. Brower, Dayton, "Chronic Arthritis—Medical Aspects"; and Dr. William R. Hochwalt, Dayton, "Chronic Arthritis —Surgical Aspects"; January 20—Findlay—Dr. Henry J. John, Cleveland, "Principles of Treatment of Diabetes", and Dr. Louis J. Karnosh, Cleveland, "Common Psychoses".

Much credit is due to Dr. B. F. Mowry, Findlay, and Dr. D. J. Slosser, Defiance, regional co-chairmen, and other physicians on the local committees of arrangements, who were responsible for the enthusiastic response which the inaugural series of the State Association's regional postgraduate project received in Northwestern Ohio.

Sixth District Society Will Meet on February 16 at Youngstown

A meeting of the Sixth Councilor District will be held at Youngstown on the afternoon and evening of Wednesday, February 16. The program for the day is being arranged jointly by the officers of the District and the Mahoning County Medical Society.

At the afternoon session, the District Society will present a program of short practical talks on industrial injuries, exclusive of fractures, such as hand infections, lacerations and contusions of fingers, ankle and foot injuries, burns, skin grafting, industrial dermatitis, eye conditions, injuries to shoulder, knee, the bad heart, tendon and nerve repair, etc. A short discussion will follow each paper.

The program at the evening session, arranged by the Mahoning County Medical Society, will be devoted to "Fractures". A printed announcement of the meeting will be sent to all members of the State Association in the District. Arrangements are in charge of the officers of the Sixth District Society, Dr. W. A. McConkey, Canton, president; Dr. John M. Van Dyke, Canton, secretary, and Dr. Wm. M. Skipp, Youngstown, Councilor.

Do You Know - - -

While still subject to final wording, the principle has been adopted by the Board of Directors of the Academy of Medicine of Cleveland that hereafter applications for membership from physicians who are graduates of foreign universities and who have been resident in this country only a short time, shall be tabled automatically for two years—a plan which is in effect in a number of the large county medical societies throughout the country.

* * *

William J. Goggin, Ashtabula and Columbus Attorney, who recently was grilled by the committee of the Ohio Senate investigating state purchases, is the registered lobbyist of the Ohio State Chiropractors' Association.

* * *

During 1936, the Journal of the American Medical Association carried obituaries of 3,581 physicians, including 3,475 in the United States. Of these, the average age was 64.5 as compared with 64.2 in 1935. Thirty-six physicians died between the ages of 26 and 29, while 10 were more than 95. Heart disease was the leading cause of death, with pneumonia second.

* * *

The group medical plan for employees of the Home Owners Loan Corporation, Washington, D. C., financed by $40,000 of Federal funds, and known as Group Health Association, Inc., has been declared illegal by Acting Comptroller-General Elliott. Because of the special status of H.O.L.C., the opinion is viewed as purely advisory.

* * *

Included in the first partial report of the grand jury investigating special paroles, was the recommendation that a new hospital be constructed at the Ohio Penitentiary, two additional resident physicians and a resident dentist be added to the staff, and that inmates of the institution not be used as pharmacists and nurses.

* * *

Dr. L. P. H. Bahrenburg, director of Marine Hospital, Cleveland, who went upon the retired list of the U. S. Public Health Service at the close of 1937, was given a vote of appreciation by the Council and Board of Directors of the Academy of Medicine of Cleveland.

* * *

Dr. William M. Guilford, Lebanon, Pa., who recently celebrated his 105th birthday, graduated from the University of Pennsylvania in 1852. Dr. Guilford retired from active practice 35 years ago, but he is still a member of his county medical society.

During the 25 year period, 1911 to 1935, the life expectancy of the American citizen was increased from 46.63 to 60.25 years, despite the World War, a severe influenza epidemic and one of the worst economic depressions this country has experienced.

* * *

At an unofficial inquiry into the deaths of 73 persons from "elixir of sulfanilamide" recently at the Cincinnati district office of the United States Food and Drug Administration, attorneys for the S. E. Massengill Co., Bristol, Tennessee, presented a written denial of charges that the company's product "had been adulterated and misbranded".

* * *

According to Dr. Morris Fishbein, Editor of *The Journal of the American Medical Association*, the outstanding medical advances for 1937 were particularly those relating to the control of dementia praecox and new uses of sulfanilamide.

* * *

Statisticians of the Metropolitan Life Insurance Company reported that the mortality rate of the white population of the United States had decreased to such an extent that there were 768,402 fewer deaths in 1935 than in 1900, and that the 1935 death toll of 1,207,359 would have been 1,975,761 if the 1900 rate had prevailed.

* * *

Two "wheel-horses" of medical organization retired from their official duties at the end of 1937, Dr. J. J. McClung, Jackson, secretary-treasurer of the Jackson County Medical Society for 26 years and Dr. T. A. Copeland, Athens, secretary-treasurer of the Athens County for 25 years.

* * *

A. E. Hardgrove, former superintendent of the Akron City Hospital, has resigned as assistant secretary of the American Hospital Association, effective April 1.

* * *

J. Freer Bittinger, Ashland, former Speaker of the Ohio House of Representatives, has requested Governor Davey to withdraw his name as an appointee to the State Industrial Commission to succeed Thomas H. Gregory, Cincinnati, whose term has expired.

* * *

The Larcomb Construction Company, Columbus, has filed a case in the Franklin County Common Pleas Court, questioning the constitutionality of the amendment to the Workmen's Compensation Law providing for districts boards of claims.

SECTION OFFICERS ASSEMBLE IMPOSING ARRAY OF TALENT FOR 1938 ANNUAL MEETING, MAY 11 AND 12, AT COLUMBUS

CONSIDERABLE progress has been made in arranging the Scientific Program for the 1938 Annual Meeting of the Ohio State Medical Association, May 11 and 12, at the Neil House, Columbus.

On Sunday, January 16, the Committee on Scientific Work held an all-day meeting at the State Headquarters Office, Columbus, for the purpose of reviewing tentative program suggestions submitted by the officers of the Scientific Sections. As a result of that meeting, most of the Scientific Section programs were definitely arranged.

Incidentally, the officers of the Scientific Sections have done a splendid job. Well-balanced and timely programs were suggested by them and approved by the Committee on Scientific Work. Section programs must be limited. Obviously, therefore, some good talent could not be used and the task of selecting speakers was not easy.

Section officers (see Front Cover Page) are as follows: Medicine, Dr. C. L. McKibben, Toledo, chairman, Dr. John Noll, Jr., Younstown, secretary; Surgery, Dr. Robert C. Austin, Dayton, chairman, Dr. W. K. Allsop, Youngstown, secretary; Obstetrics and Gynecology, Dr. G. C. Gilfillen, Dayton, chairman, Dr. Howard P. Taylor, Cleveland, secretary; Pediatrics, Dr. A. G. Helmick, Columbus, chairman, Dr. E. A. Peterson, Cleveland, secretary; Eye, Ear, Nose and Throat, Dr. Hugh G. Beatty, Columbus, chairman, Dr. Fred W. Dixon, Cleveland, secretary; Nervous and Mental Diseases, Dr. Joseph L. Fetterman, Cleveland, chairman, Dr. A. T. Hopwood, Orient, secretary; Public Health and Preventive Medicine, Dr. H. H. Pansing, Dayton, chairman, Dr. William E. Blair, Lebanon, secretary.

The above key-men play a very important role in the Annual Meeting and deserve much credit for their part in making the program for this year's meeting one of the best in the history of the Association. As customary, the complete Annual Meeting program will be published in The Journal as soon as all details and arrangements are worked out.

Ohio State Deans Honored

Dr. J. H. J. Upham and three other Ohio State University deans who are presidents of national professional associations, were feted by their faculty associates with a dinner and reception at the Faculty Club, Columbus, January 21. Those honored were: Dr. Upham, dean of the College of Medicine and President of the American Medical Association; Dr. Harry Semans, dean of the College of Dentistry and president of the American Association of Dental Schools; Dr. Oscar V. Brumley, dean of the College of Veterinary Medicine and president of the American Veterinary Medical Association, and Herschel W. Arant, dean of the College of Law and president of the Association of American Law Schools.

Clinical Congress of Radiologists

The Annual Clinical Congress of the Midwestern Radiologists will be held at the Muehlebach Hotel, Kansas City, February 11-12. The Milwaukee Road will provide a special train for the convenience of members, leaving the Chicago Union Station at 7:30 P.M., Thursday, February 10, arriving in Kansas City at 7:50 the next morning. Another special train will be available for the return trip leaving Kansas City at 7:35 P.M., February 12, arriving in Chicago at 8:15 A.M., Sunday, February 13. Additional information may be obtained by addressing B. J. Schilling, General Agent, Passenger Department, The Milwaukee Road, 100 West Monroe Bldg., Chicago, Ill.

BAR ASSOCIATION COMMITTEE'S REPORT RECOMMENDS STATUTE TO REQUIRE ANTENUPTIAL PHYSICAL EXAMINATION IN OHIO

RECOMMENDATIONS for extensive revision of the Ohio statutes on marriage and divorce have been presented to members of the Ohio State Bar Association for suggestion and criticism, preliminary to presentation to the annual meeting of the association in midsummer for consideration before submission to the State Legislature

The recommendations, presented by the Committee on Judicial Administration and Legal Reform of the bar association, represent two years of study by a Commission on Marriage, Divorce and Separation, appointed by former Governor George White at the request of the bar association.

Important sections of the report were reviewed in the January 3, 1938, issue of *Ohio Bar Association Reports*, official publication of the association.

HEATH CERTIFICATE REQUIRED

Of particular interest and importance to members of the medical profession are proposed new statutes providing that all persons making application for a license to marry must submit to a physical examination and present a health certificate to the probate judge. Proposed new sections of the code covering this question read as follows:

"Sec. 11181-12. Antenuptial physical examination; health certificate.—(1) All persons making application for license to marry shall, at any time within fifteen days prior to such application, be examined as to the existence or nonexistence in such persons of any venereal disease, epilepsy, feeble mindedness, and insanity, and it shall be unlawful for the probate judge of any county to issue a license to marry to any person who fails to present and file with such probate judge a certificate setting forth that such person is free from venereal diseases, epilepsy, feeble mindedness, and insanity, as nearly as can be determined by a thorough examination and by the application of the recognized clinical and laboratory tests of scientific research, which shall include the standard tests for gonorrhea and syphilis, made in laboratories approved by the State Department of Health or in the laboratories of the State Department of Health. Such certificate shall be made by a doctor of medicine, licensed to practice in this state or in the state in which the applicant resides, and shall be filed with the application for license to marry and shall read as follows, to wit:

"I, (name of doctor), being a doctor of medicine legally licensed to practice in the state of ....., my credentials being filed in the office of ....., in the city of ....., county of ....., state of ....., do certify that I have this ..... day of ....., 19..., made an examination of (name of applicant), and believe him (or her) to be free from all venereal diseases, epilepsy, feeble mindedness, and insanity, and that the tests for gonorrhea and syphilis required by Section 11181-12 of the Ohio General Code have been made at the ..... laboratory in (city), (state), on the ..... day of ....., 19..., and that the laboratory reports show no presence of disease.

.....
(Signature of doctor)

"(2) A county or other local public health officer having the necessary qualifications shall, upon request, make the required examination and issue such certificate, if the same can be properly issued, without charge to the applicant, if said applicant be indigent.

"(3) Any person who shall knowingly make any false statement in the laboratory report or the certificate provided for in subsection (1) of this section shall be punished by a fine of not to exceed two hundred dollars or by imprisonment for not more than six months, or both.

"Section 11181-13. When license shall not be granted.—No license shall be granted until both parties have presented to the probate judge a health certificate in accordance with the provisions of Sec. 11181-12 of this act nor if either party making application for a license is under the influence of an intoxicating liquor or a narcotic drug.

"Section 11181-14. Ten-day limitation.—No marriage license shall be effective nor shall it authorize the performance of a marriage ceremony except within ten days after the same has been issued by the probate court of the proper county. And this provision shall be printed on each license in prominent type".

PROVISIONS ANALYZED

Explaining the provisions of the proposed new Section 11181-12, the Committee on Judicial Administration and Legal Reform stated:

"This section is nearly all new and embodies one of the most important changes recommended. It proceeds upon the assumption that the physical condition of parties contemplating marriage, because of its effect upon the physical and mental health of their offspring, is a matter of concern to society. This is now partially recognized in Section 11187, which provides that a license shall not be granted when either of the applicants is an habitual drunkard, epileptic, imbecile or is insane. This section adds gonorrhea and syhpilis and provides as reliable a form of evidence of their absence as can be required, which the probate judge must have before he has authority to issue a license. This requirement has been adopted in several states and is being considered in others, including New York."

Commenting on the "ten-day limitation" pro-

vision, the committee said: "This section shortens the period in which a marriage ceremony may be properly performed after the issuance of a license from sixty days, as now provided by Section 11188-1, to ten days. This change was made upon the advice of physicians to the end that there might be as much assurance as can be reasonably provided that the health condition of the parties at the time of marriage accords with the statement in the health certificate."

At various times, the Commission on Marriage, Divore and Separation conferred with The Council and the Committee on Public Relations and Economics of the State Medical Association to obtain scientific information and advice. No action has been taken by The Council to date either approving or disapproving the proposed sections relative to a physical examination and health certificate.

Past-Presidents Honored Guests at Banquet of Mahoning County Society

Over 200 physicians from Mahoning and adjoining counties attended the Annual Banquet and "Old Timer's Night" of the Mahoning County Medical Society, Tuesday evening, January 18, at the Youngstown Club. Dr. Claude B. Norris, president of the Society, was the toastmaster. Eighteen of 24 living past-presidents attended as guests of honor.

Living past-presidents are: Dr. R. D. Gibson, 1893; Dr. H. E. Welch, 1900-1901; Dr. C. R. Clark, 1905-1906; Dr. H. E. Blott, 1909; Dr. R. E. Whelan, 1912; Dr. Sidney McCurdy, 1913; Dr. C. D. Hauser, 1914; Dr. H. E. Patrick, 1917; Dr. J. M. Ranz, 1918; Dr. W. D. Coy, 1919; Dr. W. E. Ranz, 1920; Dr. J. S. Lewis, Jr., 1923; Dr. Wm. K. Allsop, 1925; Dr. F. W. McNamara, 1926; Dr. R. W. Fenton, 1927; Dr. J. E. Hardman, 1928; Dr. W. H. Bennett, 1929; Dr. A. W. Thomas, 1931; Dr. A. E. Brant, 1932; Dr. J. P. Harvey, 1933; Dr. J. B. Nelson, 1934; Dr. J. L. Fisher, 1935; Dr. L. G. Coe, 1936, and Dr. P. J. Fuzy, 1937.

On behalf of the Mahoning County Medical Society, Dr. John B. Alcorn, Columbus, president of the Ohio State Medical Association, presented each of the past-presidents with a gavel, appropriately inscribed, in recognition of his services to the society. Con McCole, Wilkesbarre, Pa., humorist, gave an entertaining talk, full of interesting anecdotes and homely philosophy. Guests at the dinner included: Charles S. Nelson and George H. Saville, Executive Secretary and Assistant Executive Secretary of the State Association. The highly successful affair was arranged by Dr. Norris and Dr. John Noll, Jr., chairman of the program committee of the Mahoning County Medical Society.

Legislature Finally Enacts Relief Financing Program for 1938

After several month's deliberation the 92nd Ohio General Assembly, meeting in special session, has enacted a relief program for 1938, which is estimated will provide $11,000,000 of state funds for poor relief during the year.

Sources of revenue are: $6,500,000 allocated from the sales tax, to be matched by local funds on the basis of 50 cents for each dollar of state funds; .65 per cent excise tax on utilities; one-half cent a bottle tax on 3.2 beer, and the admission tax. It is estimated that the three excise taxes will raise $4,500,000, which does not have to be matched by local funds, but which the local subdivisions may use to meet the matching provisions of the bill providing $6,500,000 of sales tax funds for poor relief.

The local administration of state-provided poor relief funds remains as heretofore—with the county commissioners, who may delegate their authority to township trustees and municipal officials.

Provision is made for the appointment of a state relief director by the Governor, with the advice and consent of the Senate. His duties are to be principally advisory and statistical. He is authorized to withhold the allocation of state funds in cases where local governmental agencies fail to comply with the administrative provisions of the relief statutes. Decisions of the director may be appealed to a board consisting of the attorney-general, state auditor and superintendent of the budget. The state relief director is to be appointed for a term of two years.

Direct relief is defined in the act, as follows: "The term 'direct relief' shall mean the provision of foods, clothing, fuel, shelter, physicians' services wherever rendered, emergency dental services, and other necessary commodities and services in the home of the individual aided or, in the case of a homeless person, in a lodging house or other suitable quarters."

While the program is designed to provide for poor relief needs in the state for the year 1938, officials of some of the larger cities still contend that it will not completely solve their financial problem, and that the legislature will have tto convene later in the year to make additional relief appropriations.

Annual Conference on Medical Education

The Thirty-Fourth Annual Conference of the Council on Medical Education and Hospitals of the American Medical Association will be held at the Palmer House, Chicago, February 14 and 15. The Federation of State Medical Boards of the United States will participate in the congress.

ANNUAL POSTCOLLEGIATE CLINIC ASSEMBLY AT OHIO STATE UNIVERSITY, COLLEGE OF MEDICINE, TO BE MARCH 3-5

MANY physicians throughout the state are planning to attend the Annual Postcollegiate Clinic Assembly to be presented by the faculty of Ohio State University College of Medicine at Columbus, Thursday, Friday and Saturday, March 3, 4 and 5, in celebration of the 104th anniversary of the founding of Willoughby Medical College.

The program will begin with registration at Hamilton Hall, Neil and Eleventh Avenues, Thursday morning, March 3, followed by medical and operative clinics at Children's, St. Francis and University hospitals. During the morning, any faculty or staff member, including members of the research staff, will be available for conferences on any particular problem. Arrangements for such a conference should be made in advance if possible. If not, they can be made at the Registration Desk.

Approximately 125 short, practical talks will be made by faculty and staff members at the nine postgraduate sessions beginning Thursday afternoon.

PROMINENT GUEST SPEAKERS

Guest speakers during the assembly include: Dr. Gatewood, '10, Chicago, associate clinical professor of surgery, Rush Medical College; Dr. James C. Sargent, '15, Milwaukee, president of the Wisconsin State Medical Society; Dr. Karl A. Menninger, Topeka, Kansas, and Dr. John Rauschkolb, Cleveland.

Officers of the Medical College Alumni Association are: Dr. Waldo W. Beck, '17, Toledo, president; Dr. Charles T. Atkinson, '16, Middletown, first vice-president; Dr. Clyde W. Kirkland, '11, Bellaire, second vice-president; Dr. Jonathan Forman, '13, Columbus, secretary and historian, and John B. Fullen, Columbus, executive secretary.

All Ohio physicians are cordially invited to attend the postcollegiate assembly, which is being arranged by the following committee: Dr. Russel G. Means, general chairman; Dr. Jonathan Forman, Dr. Charles A. Doan, Dr. I. B. Harris, Dr. N. Paul Hudson, Dr. Verne A. Dodd and Dr. H. M. Platter.

The complete program follows:

Thursday Afternoon, March 3,
Conference Room, University Hospital
Charles A. Doan, presiding

P.M.

2:00—S. J. Wilson, "The Treatment of Post-Operative Parathyroid Insufficiency with Dissolved Calcium Lactate".
2:15—H. F. Ramsayer, "Visscher-Bowman Pregnancy Tests".
2:30—Wm. R. Liebschner, "Fever Therapy".
2:45—Donald Mahanna, "Heart Disease".
3:00—Recess
3:10—Lee Sharp, "Urinary Antiseptics".
3:25—Robert E. Young, "Diagnosis and Treatment of Acute Gall Bladder Disease".
3:40—Karl T. Langacher, "Decubitus".
3:55—Richard Zollinger, "Sedimentation Rate in Gynecology".
4:10—J. R. Reeves, "Gas Gangrene", (Presentation of Cases).
4:25—J. F. Rogier, "Oesophagopleural Fistula in a Case of Tuberculous Pyopneumothorax".

Thursday Evening, March 3,
Conference Room, University Hospital
Dean J. H. J. Upham, presiding

8:00—Jonathan Forman, "The First Five Years of Medical Education in Columbus".
8:15—Rollo Baker, "A Summary of the Investigative Work of the Department of Anatomy".
8:30—N. Paul Hudson, "A Summary of Research in the Department of Bacteriology".
8:45—F. A. Hartman, "A Summary of Research in the Department of Physiology".
9:00—George Curtis, "A Summary of Research in the Department of Research Surgery".
9:15—Clayton Smith, "A Summary of Research in the Department of Physiological Chemistry and Pharmacology".
9:30—Charles A. Doan, "A Summary of Research in the Department of Medicine"
9:45—Emmerich von Haam, "A Summary of Research in the Department of Pathology".

Friday Morning, March 4,
Hamilton Hall, (Medical College Building) Room 211
Rollo Baker, presiding

9:00—Walter Hamilton, "Diagnosis of Malignancies of the Rectum".
9:10—Paul Palmer, "Rectal Fistula, Its Cause and Cure".
9:20—Paul Charlton, "The Septic Hand".
9:30—H. P. Worstell, "The Use of the Plaster Cast".
9:40—James Foley, "Infectious Mononucleosis as Seen in a Health Service".
9:50—Recess.

10:00—J. V. Horst, "Uterine Bleeding".
10:10—C. J. DeLor, "Medical Gall Bladder Treatment".
10:20—John W. Means, "Some Hazards of Gall Bladder Surgery".
10:30—P. J. Reel, "Some Disturbances of Menstruation".
10:40—E. J. Stedem, "Thyroid Crisis".
10:50—Recess.
11:00—R. M. Hartwell, "Tumors in Children".
11:10—H. B. Davidson, "Carcinoma of the Cervix".
11:20—E. T. Kirkendall, "The Management of Inoperative Cancers of the Breast".
11:30—Sidney McCurdy, "Heat Pathology in the Steel Industry".
11:40—Judson D. Wilson, "Low Back Pain".

Friday Morning, March 4,

Hamilton Hall (Medical College Building) Room 122

Registration Opens 8:00 A.M.

Jonathan Forman, presiding

9:00—H. D. Emswiler, "Tinnitus".
9:10—E. Paul Shepard, "The Diagnosis of Mastoiditis".
9:20—E. W. Harris, "The Significance of Hoarseness".
9:30—Hugh G. Beatty, "Esophageal Obstruction".
9:40—Claude S. Perry, "Medical Advances in Eye Treatment".
9:50—Recess.
10:00—G. O. Graves,, "The Babinski Reaction".
10:10—E. Harlan Wilson, "Sciatica".
10:20—H. E. LeFever, "The Scope of Encephalography".
10:30—Frank Hamilton, "Intraspinal Injection of Alcohol for Intractible Pain".
10:40—George T. Harding, "Paralysis Complicating Rabies Treatment".
10:50—Recess.
11:00—Harrison Evans, "Unrecognized 'Strokes' in Hemorrhage of the Silent Area".
11:10—Nicholas Michael, "The Modern Methods of Treatment of Dementia Praecox".
11:20—F. C. Wagenhals, "Cerebral Arteriosclerosis".
11:30—Beatrice Postle, "Phychosomatic Relationship".
11:40—Dwight Palmer, "Psycho-Biology as Applied to Medical Practice".

Friday Afternoon, March 4,

Hamilton Hall (Medical College Building) Room 312

Harry L. Reinhart, presiding

1:00—I. D. Puppel, "The Recognition of Hyper-Parathyroidism".
1:10—Donald Yochem, "The Diagnosis and Treatment of Pneumothorax in General Practice".
1:20—John Mitchell, "Permanent Structural Changes as the Result of Allergy in Childhood".
1:30—C. H. Benson, "Management of Child Sent in with Positive Mantoux Test".
1:40—O. W. Jepsen, "Medical Treatment—Essential Hypertension".
1:50—Recess.
2:00—J. W. Wilce, "The Adolescent Heart".
2:10—Howard Mitchell, "The Status of Pertussis Immunization".
2:20—Robin Obetz, "Chest Pain in Heart Disease".
2:30—R. W. Kissane, "Diagnosis of Myocardial Contusions".
2:40—Robert C. Kirk, "The Management of Acute Cardiac Emergencies".
2:50—Recess.
3:00—E. G. Horton, "Practical Procedures in Poliomyelitis".
3:10—E. H. Baxter, "The Significance of Vomiting in Infancy".
3:20—S. D. Edelman, "Acquired Hemoplegia in Infants".
3:30—O. L. Coddington, "Economic Factors in Infant Feeding".
3:40—John E. Brown, Jr., "The Use of Sulphanilamide in Children".
3:50—Recess.
4:00—B. F. Barney, "Drug Eruptions".
4:10—Gilman Kirk, "Some Aspects in Treatment of Varicose Veins".
4:20—W. A. Stoutenborough, "Ocular Tuberculosis".
4:30-4:50—G. O. Graves, "Movies Made in the Department of Anatomy".

Friday Afternoon, March 4,

Hamilton Hall (Medical College Building) Room 122

Verne A. Dodd, presiding

1:00—F. A. Hitchcock, "Determination and Interpretation of Basal Metabolism".
1:10—Herman W. Koerper, "Management of Diabetes in Pregnancy".
1:20—Andrews Rogers, "Hematoporphyrin in Early Toxemia of Pregnancy".
1:30—C. W. Pavey, "Injuries to the Child During Labor".
1:40—T. F. Ross, "The Present Status of Anemias of Pregnancy".
1:50—Recess.
2:00—Emmerich von Haam, "The Diagnosis of Venereal Lesions".
2:10—Carl L. Spohr, "The Precipitin Tests for Syphilis".

2:20—Wm. N. Taylor, "Tumors of the Testicle".
2:30—Conrad A. Kuehn, "The Indications for Trans-Urethral Prostate Resection".
2:40—Dan Morse, "Bronchiectasis".
2:50—Recess.
3:00—R. S. Fidler, "The Glucose Tolerance Test in the Diagnosis of Pituitary Disfunction".
3:10—Bruce Wiseman, "The Incidence, Diagnosis and Treatment of Infectious Mononucleosis".
3:20—C. C. Landen, "After-Care of Acute Bronchitis".
3:30—Philip T. Knies, "The Treatment of Pulmonary Abscess".
3:40—T. F. Lewis, "Menopausal Headaches".
3:50—Recess.
4:00—William Mitchell, "Aminophyllin in the Treatment of Asthma".
4:10—W. W. Hicks, "Abdominal Pain".
4:20— to 4:40—G. O. Graves, "Movies Made in the Department of Anatomy".

Friday Afternoon, March 4,

Hamilton Hall (Medical College Building) Room 211

Herbert M. Platter, presiding

1:00—George Watson, "Complement Fixation Test for Gonorrhea in the Female".
1:10—M. L. Ainsworth, "Treatment of Whooping Cough in Children under Two Years of Age".
1:20—J. C. Vanneter, "Undulant Fever as the Cause of Abortions".
1:30—O. C. Woolpert, "Lymphocytic Choriomeningitis as a Disease Entity, Recently Recognized".
1:40—N. Paul Hudson, "The Prevalence and Prevention of Smallpox".
1:50—Recess.
2:00—Clayton Smith, "The Physician and the Pharmacist".
2:10—W. A. Starin, "Botulism, A Type of Food Poisoning".
2:20—Willard Andrus, "The Pathological Physiology of Nephritis".
2:30—L. H. Snyder, "Blood Tests for Disputed Paternity".
2:40—C. V. Moore, "Practical Considerations Governing Iron Therapy in the Anemic States".
2:50—Recess.
3:00—Harry M. Sage, "Medical Refraction".
3:10—Mary Graber, "Nutrition as an Aid to the Doctor".
3:20—B. C. Houghton, "Differentiation and Treatment of the Polycythemic States".
3:30—J. J. Coons, "Mucous Colitis".
3:40—"George I. Nelson, "The Clinical Use of Digitalis".
3:50—Recess.
4:00—Hugh J. Means, "X-ray Treatment of Menopause Hemorrhage".
4:10—H. L. Reinhart, "Interpretation of Spinal Fluid Examination".
4:20—S. J. Goldstein, "The Treatment of Diabetes".
4:30—S. A. Hatfield, "Subacute Bacterial Endocarditis".
4:40—C. J. Shepard, "The Cause and Treatment of Acne".

Alternates

Jonathan Forman, "Non-Specific Management of Asthma".
Russel G. Means, "Sinusitis in Children".
J. P. Farson, "Lobar Pneumonia in Infants".

Friday Evening, March 4,

Alpha Omega Alpha Annual Lecture

University Chapel—Old Main Building 8:00 P.M.

George M. Curtis, presiding

8:00—Dr. Karl A. Menninger, Topeka, Kansas, "The Scientific Study of Personality".
9:30—Meeting of the University Hospitals Interns and Residents Association to follow at the Deshler-Wallick Hotel—Football Pictures.

Officers: John V. Horst, President; Verne A. Dodd, Vice-President; Gilman Kirk, Program Chairman; Conrad A. Kuehn, Secretary.

Saturday Morning, March 5,

Campbell Hall

(Second Building North of Hamilton Hall, Medical College, West Side Neil Avenue)

N. Paul Hudson, presiding

9:00—A. D. Frost, "Practical Considerations in Corneal Diseases".
9:10—Verne A. Dodd, "Russel Traction in Fractures of the Shaft of the Femur".
9:20—George M. Curtis, "Splenectomy in the Treatment of Anemias".
9:30—J. F. Bateman, "The Clinical Aspects of the Reaction of Degeneration".
9:40—Charles A. Doan, "The Differentiation and Treatment of Hypoplastic and Myelophthisic Anaemias".
9:50—Recess.
10:00—J. H. J. Upham, Dean, "The Progress of the College of Medicine".
10:10—Pres. Geo. Rightmire, "The University and Its Alumni".

10:20—Dr. Gatewood, Arts, '07, M.D., '10, Alumni Board Visitor to College of Medicine, "The Needs of the College".

10:30—Dr. James C. Sargent, '15, President, Wisconsin State Medical Society, "The Present Challenge to the Medical Profession".

Saturday Noon, March 5,
Main Ball Room, Deshler-Wallick Hotel

12:00 to 2:00—Alumni Reunion and Class Luncheons.

Presiding: Dr. Waldo W. Beck, '17, Toledo, Ohio, President of the Medical Division, Ohio State University Association.

GUESTS

Dean J. H. J. Upham, President, American Medical Association.

Dr. John B. Alcorn, associate professor of ophthalmology, President, Ohio State Medical Association.

Dr. Gatewood, '10, Chicago, Ill., member, Alumni Board of Visitors.

Dr. James C. Sargent, '15, Milwaukee, Wisconsin, President of the Wisconsin State Medical Society.

Dr. F. E. Mahla, '13, Assistant Director, State Board of Health.

Dr. Arthur W. Thomas, '14, Director, Bureau of Child Hygiene, State Board of Health.

SPEAKERS

Mr. John B. Fullen, Secretary of the Ohio State University Association, "The Alumnus and His Association".

Dr. C. J. Altmaier, '01, '05, Marion, Ohio, Trustee of the University, "The College of Medicine and the Commonwealth".

Dr. Burrell Russell, New Philadelphia, Ohio, Trustee of the University, "The College of Medicine and Postgraduate Instruction".

Saturday Afternoon, March 5,

St. Francis Hospital, Lecture Room
(Entrance, 308 E. Town St.)

I. B. Harris, presiding

P.M.

2:20—L. L. Bigelow, "Hernia as a Factor in Morbidity and Mortality".

2:30—M. D. Miller, "Preventive Medicine in the Management of Tuberculosis".

2:40—L. H. VanBuskirk, "Lead Encephalopathy".

2:50—T. E. Rardin, "Treatment of Lobar Pneumonia with Serum".

3:00—M. P. Kanter, "Office Treatment of Diabetes".

3:10—Recess.

3:20—John Rauschkolb, Guest Speaker, B.A., '20, Ex-Med., '23, Cleveland, Ohio, "The Adequate Treatment of the Syphilitic Patient".

4:10—L. J. Roth, "Sulphanilamide in the Treatment of Gonorrhea".

4:20—H. F. Fulton, "Preliminary or 'Scout Films' of the Abdomen".

4:30—C. C. Sherburne, "Gonorrheal Arthritis".

6:00 P.M.—Fraternity Banquets.

HELP US KEEP THE JOURNAL MAILING LIST ACCURATE

It is important that the mailing list of *The Ohio State Medical Journal* be kept up to date and accurate. Members will have to help *The Journal* do this. When and if you change your mailing address, drop a card to *The Journal*, giving your new address. If you would like to have your copy of *The Journal* sent to your home instead of your office (or vice versa), write the Headquarters Office, Columbus. Please submit changes in address promptly to assist *The Journal* in avoiding delay in making mailing list revisions.

National Art Exhibition for Physicians

The American Physicians' Art Association, a national organization of medical men who have ability in the fine arts, will hold a first national exhibition in the San Francisco Museum of Art, San Francisco, California, in June, 1938. (The American Medical Association Convention is June 13-17 in the same city). There are three classifications for membership: active, associate, and contributing. The first annual exhibition promises to be of unusual interest with entries to be accepted (after jury selection) in the following classifications: oils, watercolors, sculpture, photography, pastels, etchings, crayon and pen and ink drawings (including cartoons), wood carvings and book bindings. Scientific medical art work will not be accepted. The exhibition is not limited to first showings. All entries close April 1, 1938. Any physician interested should communicate at once with the secretary of the American Physicians' Art Association, Suite 521-536 Flood Bldg., San Francisco, California.

Alvarez is Guest Speaker at Toledo Academy Postgraduate Lectures

The Fourteenth Postgraduate Course of the Toledo Academy of Medicine, February 1 to 5, will consist of a series of lectures by Dr. Walter C. Alvarez, Rochester, Minn., professor of medicine, University of Minnesota Graduate School of Medicine, on "Diseases of the Gastrointestinal Tract". The lectures will be presented from 4:30 to 6:30 each afternoon, with one evening meeting, from 8:30 to 10 o'clock, on Friday evening, February 4. All sessions will be at the Academy of Medicine Building. A brief question period will follow each lecture. The fee for the course is $6.00.

The program follows: February 1, "The Mechanics of the Digestive Tract"; "The Secretory Function of the Digestive Tract". February 2, "The Taking of a Good History and the Interpretation of Symptoms"; "The Causes of Abdominal Pain and Other Symptoms"; "Hints in the Diagnosis of Diseases in the Digestive Tract"; "What Can Be Learned From Roentgenological Studies, Laboratory Tests, Physical Examination, Gastroscopy and Therapeutic Tests". February 3, "The Prescribing of Diets, Food Allergy, Causes and Treatment"; "The Causes and Treatment of Constipation;" "The Causes and Treatment of Diarrhea;" "The Treatment of Gastric and Duodenal Ulcer and Pseudo-Ulcer". February 4, "The Diagnosis and Treatment of Disease of the Gallbladder, Liver and Bile Ducts"; "The Diagnosis and Treatment of Cancer of the Digestive Tract"; Evening Meeting, "The Treatment of Mucous Colitis, Flatulence, Migraine, Nervous Regurgitation, Chronic Appendicitis, and Cerebral Arteriosclerosis with Gastrointestinal Symptoms". February 5, "The Wrong Handling of the Neurotic Patient"; "What's Wrong With the Patient Who is Always Weak, Tired and Full of Aches and Pains". Members of the Academy's Postgraduate Committee are: Dr. S. R. Salzman, chairman; Dr. A. A. Brindley, Dr. H. K. Beckwith, Dr. A. H. Schade, and Dr. M. W. Diethelm.

COMING MEETINGS

Ohio State Medical Association, Columbus, May 11-12.

American Medical Association, San Francisco, June 13-17.

American College of Physicians, New York, April 4-8.

American College of Surgeons, New York, Oct. 17-21.

American Public Health Association, Kansas City, Oct. 25-28.

Association of Military Surgeons of the United States, Rochester, Minn., Oct. 13-15.

Tri-State Medical Association, Findlay, April 12.

Schedule of Lectures for Cleveland Academy Postgraduate Course

The Annual Postgraduate Course of the Academy of Medicine of Cleveland for 1938 will be devoted to practical lectures on current medical problems. There will be no registration fee and no record of individual attendance. Each speaker will be furnished a five page summary of his paper, which will be mimeographed, and sold at the lecture for ten cents per copy. Lectures will be on Friday afternoons, at 3 o'clock, in the Medical Library Auditorium. No lecture will last more than one hour. Two lectures have been given: January 21, "Treatment of Pneumonia", by Dr. G. S. Shibley; January 28, "Management of Hypertension", by Dr. R. W. Scott. Following is the schedule for remaining lectures: February 4, "Treatment of Common Skin Diseases", by Dr. C. L. Cummer; February 11, "Treatment of Chronic Arthritis", by Dr. R. M. Stecher; February 18, "Treatment of Infections of the Genito-Urinary Tract"; February 25, "Management of Acute Exanthemata", by Dr. J. A. Toomey; March 4, "Treatment of Nephritis", by Dr. J. M. Hayman, Jr.; March 11, "Treatment of Peptic Ulcer", by Dr. V. C. Rowland; March 18, "Management of Diabetes Mellitus", by Dr. C. D. Christie; and March 25, "Treatment of Anemia", by Dr. R. L. Haden. The committee in charge of the course is: Dr. Haden, chairman, Dr. Shibley and Dr. Cummer.

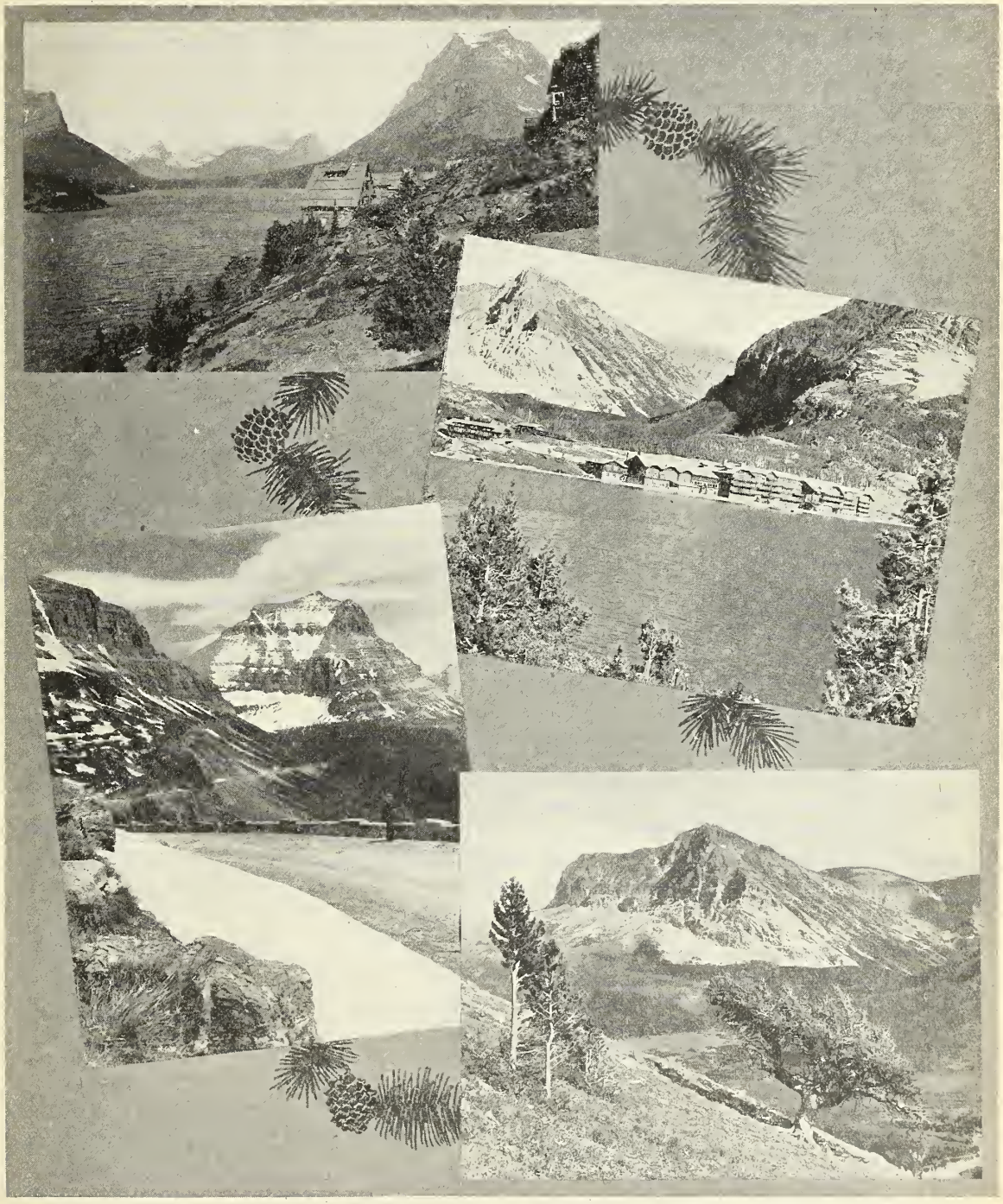
Sales Tax Collections in 1937

Last year total sales tax collections in Ohio amounted to $50,197,536.80, according to figures recently announced by State Auditor Joseph Ferguson. Of this amount, $2,376,051.18 was spent for administration. The legislature appropriated $5,000,000 for the use of local subdivisions for poor relief, $1,000,000 for flood relief and $4,000,000 was set aside to pay the interest and retirement charges on poor relief bonds issued in 1932. The balance, $37,821,485.62, was divided as follows: 60 per cent to the State Department of Education to be distributed to local school boards on a basis of average daily school attendance, and 40 per cent was paid to the counties to be distributed among the county, municipal and township governments. The schools received $22,692,891.37 of the sales tax collections and the local governments, $15,128,594.25.

Addresses Medical Library Association

Dr. Jonathan Forman, Columbus, Editor, *The Ohio State Medical Journal*, addressed the annual meeting of the Cleveland Medical Library Association, on January 21. His subject was "The Beginnings of Medical Education in Ohio".

VIEWS OF GLACIER NATIONAL PARK, TO BE VISITED BY OHIO SPECIAL TRAIN AFTER SAN FRANCISCO A. M. A. SESSION



Upper Left—Sun Camp, St. Mary Lake, at Lower Chalets. **Left Center**—Going-To-The-Sun Highway with Going-To-The-Sun Mountain in the distance. **Right Center**—Many Glacier Hotel, in the heart of the park. **Lower Right**—View from Mount Altyn; Mount Wynn in distance. **Complete details regarding the Ohio Special will be published in the March issue of The Journal after which reservations may be made.**

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Five Important Reasons Why Membership Dues Should Be Paid Now

A check of the membership records at the State Headquarters Office reveals that there has been some delay in the receipt of 1938 State Association membership dues from some parts of the state.

In some instances this may be the fault of the county society secretary. However, in most cases we believe it is due to the negligence of individual physicians, some of whom have been long-time members in good standing in medical organization.

This, in our opinion, is a serious oversight on the part of somebody. **It should be remembered that membership in the Ohio State Medical Association is on a calendar year basis and that a physician is not a member until his dues are received at the Headquarters Office. In other words a physician is delinquent in membership from January 1 of each year until his dues are received at Columbus.**

Here are several extremely important reasons (tangible reasons) why there should be no delinquency in membership.

1. Data for the 1938 edition of the American Medical Directory is being assembled at this time in the office of the A.M.A. and **unless a physician's 1938 membership dues are received in the very near future by the State Headquarters Office so that proper membership certification can be made to the A.M.A., his name will appear in the Directory in small type, indicating he is not a member of medical organization.** This is something which every physician should avoid, as the Directory is used by many organizations, agencies, insurance companies, hospitals, etc., to ascertain the professional standing of physicians and naturally preference is given to names appearing in big type (those who are members).

2. Membership in medical organization plays an important part in securing professional liability insurance. Most liability insurance companies carefully check the membership status of physicians before issuing them a policy or renewing an old one. **In fact, one large liability insurance company (writing a large portion of the professional liability insurance coverage in Ohio) has adopted a regulation making the issuance of a policy contingent on membership in medical organization.** A physician's ability to secure liability insurance is in jeopardy during the period of membership delinquency.

3. **Lapse in membership means that a physician cannot receive *The Ohio State Medical Journal*. Mailing list of *The Journal* will be revised shortly and the names of delinquent members will have to be removed.** We believe *The Journal* is important enough that it should be placed in the hands of every Ohio physician each month. Obviously, it cannot be furnished gratis to delinquents except for a very limited period.

4. The object of the State Association in having a State Headquarters Office is to provide helpful services for members who contribute toward the overhead of that office. Therefore, it **becomes compulsory for that office to limit its services and facilities, including the valuable Workmen's Compensation investigating service and information services on many matters, to members in good standing.** In our opinion, that is the way the office should function as those who "pay the freight" are the ones entitled to benefits.

5. Fellowship in the A.M.A. and in most special professional and scientific societies is contingent on membership in medical organization. **Lapse in membership in the State Association endangers membership in special societies.**

These points are cited because they affect each physician personally and may be matters which he has overlooked.

Pay your 1938 State Association membership dues immediately to the secretary-treasurer of your county medical society and ask him to forward them without delay to the Headquarters Office, Columbus. If you have paid your dues, ask your local secretary-treasurer if he has sent them to Columbus, if for any reason you have not received a 1938 membership card direct from Columbus.

Wisdom is the daughter of experience—Leonardo da Vinci.

A Few Words of Advice To the Professors Regarding Dictatorship

According to reports in *Newsweek*, "fears of dictatorship in education and increasing regimentation of human conduct marked the year-end reports of two outstanding universities" — Johns Hopkins and Columbia.

Dr. Isaiah Bowman, Johns Hopkins, warned "against possible Federal control of colleges and ensuing deadly

uniformity of indoctrination to suit the government of the day".

Dr. Nicholas Murray Butler, Columbia, took issue with "a type of despotism under which free education would be stifled".

Thinking persons will see the wisdom of these warnings, realizing that educational institutions cannot remain free and open-minded if they are too heavily obligated financially to any one source, be it government or philanthropic agency.

There is a similarity of thinking between farsighted educators and farsighted physicians with respect to regimentation of their respective professions. For that reason it seems strange that some of the very educators (not those mentioned here) who plead for academic freedom and educational activities without strings attached, are listed among proponents of schemes and fancies which would bring about regimentation of the medical profession and deterioration of medical service. Those professors who lean toward socialization of medicine and encourage their students to think likewise, should remember that the evils which would infest medicine through regimentation would be akin to those which they visualize in any system which would restrict academic freedom and expose education to financial dictatorship.

It is better to go without security than to sacrifice our intelligence and liberty—Harry Emerson Fosdick.

Don't Blame Us If Sir Seymour Has Stepped on Your Toes

According to a press association feature story under London dateline, Sir Seymour Hicks, famous British actor, recently offered a set of "do's" and "don'ts" to students of Westminster Hospital Medical School as a guide to them as they embark on general practice.

We realize that it would be asking too much of the neophyte, to say nothing of the seasoned physician, to expect him to observe Sir Seymour's code in its entirety. Nevertheless, his suggestions are offered for what they are worth, and as points of interest at least, as follows:

"Don't keep your patients waiting.

"Don't let your wife talk about medicine and surgery in private life.

"Don't give us small talk in the consulting-room.

"Don't try and impress on us that you're attending Lord and Lady Lipstick.

"Don't allow scandal to be talked in your presence.

"Don't back horses.

"Don't go to the moneylenders.

"Don't talk medical shop in mixed company.

"Do always dress for the part.

"Do cultivate an easy, smiling manner.

"Do employ a smiling parlormaid to open the door.

"Do be definite, even if you're wrong."

The trend of the times indicates, I think, that the future of our civilization will be determined by public opinion. If that be so, then the doctor needs public opinion as much as public opinion needs a doctor.—Carl Ackerman.

Senator McCarran Puts H.O.L.C. Medical Service Plan on the Spot

United States Senator Pat McCarran, Nevada, called a spade a spade in demanding an explanation from officials of the Home Owner's Loan Corporation concerning the whys and wherefores of the group medical service program which is being operated for employes of that agency, according to the *New York Herald Tribune*.

Perhaps it would not be amiss for members of Ohio's congressional delegation and congressmen of other states to make an investigation of their own about the setup and activities of the H. O. L. C. medical plan. They might do so if their physician-constituents would request them to do so and furnish them with the sound reasons why this governmental system of medical service should be eliminated while it still is in its infancy.

The *Herald Tribune's* account of Senator McCarran's investigation and demands follows:

"Senator Pat McCarran, Democrat, of Nevada, today called on officials of the Home Owner's Loan Corporation 'to explain on what authority they have contributed $40,000 of government funds to an experiment in collective medicine.'

"The reference was to the contribution by the H.O.L.C. and the Federal Home Loan Bank Board of $20,000 for the operation of Group Health Association, Inc., giving medical care to employees of the H.O.L.C. and the F.H.L.B.B. and their affiliated agencies. The G.H.A. has been promised a further contribution of $20,000 next year. A clinic has been in operation for several weeks.

"Senator McCarran in his statement said he had called on the H.O.L.C. officials for an explanation because 'there seems to be considerable doubt as to the legality of it.' The H.O.L.C., he pointed out, was set up to lend money to private citizens on their homes or to guarantee loans already made.

" 'It was never contemplated by Congress,' the Nevada Senator wrote, 'that any money appropriated for the H.O.L.C. would be donated to any one or to any organization for any purpose. It certainly was not contemplated that any money would be donated for an experiment in collective state-subsidized medicine.

" 'The Comptroller General, whose duty it is

to pass on all expenditures of government funds, should investigate this particular expenditure at once.'

"Senator McCarran said that he understood the employees of several other departments were contemplating setting up a similar system to that of the H.O.L.C.

"'Employees of these departments should realize that they place themselves in grave danger when they exceed their authority and when they dispense government funds without legal authorization,' the letter continued. If Congress considers it wise to make experiments in socialized medicine, or in socialized anything else, Congress is quite competent to order such experiments. In the present case the officials of the H.O.L.C. were hired and are being paid by the government to run the affairs of that agency. They were not hired because of their social views or theories in collectivism.'"

The well-conducted medical society should represent a clearing house in which every physician of the district would receive his intellectual rating, and in which he could find out his professional assets and liabilities.—Sir William Osler.

Palm for Enterprise Awarded Ashtabula County Medical Society

This month's prize for initiative and enterprise is awarded to the Ashtabula County Medical Society. That society has arranged with the management of Radio Station W. I. C. A. at Ashtabula to present a series of public health and medical broadcasts. Members will be designated to make the broadcasts, using material furnished by the Bureau of Health and Public Instruction of the American Medical Association for the most part, and occasionally original material and material supplied by the Bureau of Child Hygiene, State Department of Health.

Incidentally, the society is indebted to Dr. A. W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, and a former member of the Ashtabula County Medical Society, for assistance and advice on preliminary arrangements.

This should stimulate similar activity by other county medical societies in communities where there are broadcasting facilities. For some years, some of the larger medical societies in Ohio have made use of the radio, but this is one of the first programs of this character undertaken by a medical society outside of the metropolitan areas.

The idea appeals to us. It will give the Ashtabula County Medical Society an opportunity to extend the scope of its public service, promote public health, and enhance its local prestige. We wish the society all kinds of success in its venture.

Advice of Industrial Commission Chairman Regarding Filing of Claims

In a statement published in a recent issue of *The Monitor*, monthly publication of the State Industrial Commission, Judge Thomas M. Gregory, chairman of the Commission, warns of the growing tendency on the part of employers and claimants to rely on outside sources to make compensation blanks and points out the dangers of such practices.

Mr. Gregory's comments should be of interest to all physicians handling workmen's compensation cases. When forms are not made out in the proper manner and incomplete information is supplied, there is certain to be delay in adjudication of claims, resulting in delay in the payment of medical bills. In some cases, circumstances in connection with an injury have some bearing on the diagnosis of a disability. If the physician has a complete set of facts before him when he examines a patient, he can do a better job.

For these and other reasons, we believe that it would be a good idea for all physicians to do what they can to encourage claimants being treated by them to insist that the proper officials of the company where they are employed, handle all forms and that they secure all pertinent data as promptly as possible. In doing so physicians will be aiding the disabled claimant, themselves, and the Commission.

Chairman Gregory's statement on this important matter read as follows:

"The Industrial Commission wishes to call attention to a growing tendency on the part of employers and claimants to rely upon outside sources to make out the application forms for compensation. The result has been that the original application quite often ignores many of the essential facts regarding the injury, thereby necessitating delays in the final disposition of such claims.

"For years, the Commission has been endeavoring to impress upon the minds of both employers and employees, the fact that application forms and all subsequent reports should be filled out by the employer, or someone in authority who is thoroughly conversant with the facts, in order to expedite their consideration by the Commission and obviate needless delay for which the administrators of the fund are frequently criticized.

"It should be apparent to both employers and claimants, that it is practically impossible to pass intelligently upon the merits of a claim where the facts surrounding the accident, the nature and extent of the injury and other necessary information are not clearly set out in the original application. Intelligent consideration of claims and equitable adjustments of them, is something its administrators owe to the State Insurance Fund if its stability is to be maintained.

"All too often claims come into commission offices which have apparently been made out by persons having absolutely no knowledge of the

salient facts attending the accident and the injury sustained. They bear every indication of having been made out without consultation with the employer or supervisory authorities who should be in possession of the facts. In consequence, there is an unavoidable delay for investigation, in many instances, on claims that should be a mere matter of routine.

"This slipshod method of handling claims is not only unjust to the commission, in that it brings on unmerited criticism for delay in the disposition of claims, but it is a serious detriment to both the employer and the employee. It takes time, effort and money to delve for facts that should have been known and set down in the original application and the expense is not entirely a burden upon the fund. It affects the employer and claimant as well.

"In this connection, employers are urged to make a close analysis of all accidental injuries, getting at the true facts of their occurrence and particularly the nature and extent of injuries. If they do this and incorporate the facts more specifically in the claimant's application, they may obviate much difficulty in the future through the resurrection of inactive claims.

"In some quarters, there is a lamentable lack of care in primary medical examinations following an injury. As a result, the groundwork is set for a revival of claims in future months or years, which may work an injustice upon either the employer or the claimant. For instance, a worker might be brought to the first-aid station with a bad scalp wound. Since it is the most visible evidence of injury, it often receives the undivided attention of the doctor, whereas it may be trivial when compared with more serious internal or external injuries to the limbs or body which casual diagnosis does not reveal. Later, when the undetected injuries cause disability, it is a subject for controversy between the employer and the claimant and just another needless problem for the Commission.

"It is safe to say that during the life of the Workmen's Compensation Fund, hundreds of thousands of dollars have been lost to employers as the result of superficial medical examinations and carelessness in the making out of compensation forms. And in any number of cases, there is positive evidence that latent injuries which have brought on incapacity after the time limit for the filing of claims, has worked an inexcusable injustice against injured employees. In either case, had all the facts been set out in the original claim, it would have been equitably disposed of without rancor on the part of either employer or claimant.

"It is the simple thing, and the logical thing, to get all the facts about an industrial injury. It is just as simple and just as logical, to set them out in the beginning without the necessity for expensive investigation which will eventually reveal them. But the true facts regarding an accident cannot be intelligently presented by persons not identified with the operation wherein it occurred. In the long run, every claimant will find it profitable to reach with the employer an agreed statement of facts regarding an injury and make the facts clear in the application form.

"If the employers and employees will cooperate fully along these lines, the Industrial Commission of Ohio can give assurance that the adjustment of a great many claims now needlessly delayed will be expedited, with economic profit to the employer and the employee."

Know Any Good Locations for Some Younger Physicians?

For more than a year, the State Headquarters Office has been operating a service designed to assist young physicians in finding new locations and openings and to aid older physicians in their search for partners, assistants, etc.

This "exchange" has proved quite useful to some physicians. It has been a popular service and every effort has been made to make it a result-getter.

Because of its value, this activity will be continued indefinitely. Its importance can be enhanced if members who happen to know of desirable locations or who want young associates will communicate with the Headquarters Office, Columbus. Data received is tabulated and through correspondence an effort is made to get parties seeking locations and those knowing of opportunities, together.

This service can be of special value for physicians just starting practice. On some occasions they are up against a mighty tough proposition in finding and selecting locations and need the assistance and cooperation of older men. The Headquarters Office is willing and anxious to help. Are you?

The disquieting thing about medicine is the difficulty its spokesmen have of knowing what the group they represent actually wants.—Bulletin of the Toledo Academy of Medicine.

"Speak up," New Prexy of Hempstead Academy Tells His Members

In our opinion, the unique way adopted by Dr. William E. Scaggs, Portsmouth, new president of the Hempstead Academy of Medicine, to stimulate interest among members of that society and discover activities which the members would like to have the academy undertake during the ensuing year, is a ten-strike. We recommend it to presidents of other county medical societies.

Dr. Scaggs has sent a postal card to each member of the Hempstead Academy of Medicine, asking him to reply to the questions asked and mail the card to him. His inquiries were: (1) What suggestions do you have for improving the service of organized medicine in Scioto County? (2) Do you attend academy meetings regularly? If not, why? (3) How can such meetings be made more helpful to you? (4) What can the president do to make his work more effective and beneficial to the membership?

Accompanying the postal card was a letter

over Dr. Scaggs' signature, reading in part as follows:

"As a rule members and officers alike are enthusiastic at the beginning of a new year of work. Since I consider my position as a job and being not unmindful of the duties and responsibilities thereof, I wish to capitalize on that enthusiasm at the earliest possible moment by sending this letter with the enclosed card. The purpose of this letter is to provide each member of the Academy with an opportunity to aid in the formulation of policies by which the organization will operate during 1938. No doubt this year will be essentially the same as previous years but it will unquestionably present some problems peculiar to itself only. For example, changes in social and economic trends make it mandatory that all county medical societies be active and alert . . . especially this year.

"It is well to appraise our situation here in Scioto County. Our members, having access to three splendid hospitals, serve a population of over one hundred thousand people. Reference of patients to leaders in the various specialties located in Portsmouth and in nearby medical centers assure our citizens of adequate scientific care. In short, we have ample opportunity for practicing our profession in such a manner as to render efficient public service. The only group that can possibly ruin a constructive program is one comprising seventy-two members and known as the Hempstead Academy of Medicine. Surely, we will not obstruct our own progress. It is squarely up to us. The assumption of medical practice by lay groups is due largely to the indifference of many physicians to the work of their own organizations.

"I wish to call attention to a few matters which should be to the interest of all:

"1. PAYMENT OF DUES. It will facilitate the work of our own as well as the state organization if our dues are paid promptly.

"2. ATTENDANCE AT ACADEMY MEETINGS. It is obvious that no member of any organization in which he is at all interested can be so well informed that he cannot learn SOMETHING to his own advantage from the dullest meeting. It will be the desire of the program committees to furnish the best speakers available and to cover a variety of the most desirable subjects. The younger men should be inspired by the continued interest of older members, some of whom come from long distances to attend.

"3. PUBLIC RELATIONS. The local press has assured me that it is willing to keep the public informed concerning all matters which we consider of public interest.

"4. SYPHILIS. The Academy should cooperate with the Committee on Education of the Ohio State Medical Association for the purpose of enlightening the public in regard to the early diagnosis and treatment of syphilis.

"5. MOVING PICTURES. At my own expense I have already begun the taking of moving pictures of our members. It will require a long time to get around to all but I want your picture along with the others. Beginning with the February meeting I shall arrange to show the first episode of the serial. You cannot afford to miss seeing on the screen the counterparts of Warner Baxter, Clark Gable, Laurel and Hardy and others taken from our own ranks.

"6. GOOD FELLOWSHIP. This asset should be encouraged to the fullest at all times among the staffs of the various hospitals and with the dental and pharmaceutical associations.

"7. TUBERCULOSIS. This disease at present constitutes a public health menace in Scioto County. In 1935 there were 26 deaths; in 1936, 28 deaths; in 1937, 35 deaths. There are approximately five times as many open active cases as death. The danger is apparent but it is increased by the lack of funds to supply our quota of sanatorium beds. The county commissioners tell us that funds will have to be reduced if not curtailed. Every physician should consider himself an assistant public health officer in his own practice as far as advice is concerned at least."

If this is not democratic procedure, what is it? Dr. Scaggs has indicated a desire to be guided by the will of the membership. He has given the membership a chance to kick in with constructive suggestions. The plan should get results.

The homes of the nation are the places of our greatest opportunities to promote the tenets of good living and good government. Have we taken advantage of this opportunity to mold public opinion?—Minnesota Medicine.

Some "Resolves", for 1938; Why Don't You Give Them a Whirl?

Admitting that we're a bit late with New Year Resolutions, we can't resist passing on to all members of the State Association the set of resolutions formulated by Dr. Howard Dittrick, Cleveland, for members of the Cleveland Academy of Medicine, and published in the January issue of *The Bulletin* of that society.

Here are the "resolves" Dr. Dittrick suggests for all physicians for 1938:

"Be It Resolved:

"1. That I will endeavor to acquire knowledge from a heritage of accumulated medical lore for the better understanding of our professional problems.

"2. That in acordance with the oath of Aesculapius, I will assist the young physician in these troublous times to the end that his feet may be set in wisdom.

"3. That it shall be my purpose (as Stevenson has written) to 'bring air and cheer into the sickroom and often enough, though not so often as I desire, to bring healing.'

"4. That my remuneration shall be governed by the principles established by the Father of Surgery, Guy de Chauliac, namely, 'according to my work, to the means of the patient, to the quality of the issue, and to my own dignity.'

"5. That I will follow the teaching of Osler in devotion of a portion of the coming year to postgraduate 'brain dusting.'

"6. That I will give heed to the regimen of Miamonides, 'holding myself far from everything that can hurt my health' and thus defer as long as may be the onset of peptic ulcer and coronary disease.

"7. That I will devote part of my time to some medical organization work, accepting this

as my bit in advancing the usefulness of medicine.

"8. That, if a niche for my services be not available, I will not attempt to discredit the work of those who are giving their time and effort on behalf of medical progress.

"9. That I will not follow any false, self-appointed Messiahs who would lead us out of the maze of changing conditions into a quick and easy Utopia.

"10. That, although my major concern shall be the care of patients, my life shall be enriched by the pursuit of study in other fields, hobbies and travel."

So far as the well-being of the human race is concerned, I look upon the subject of syphilis as the great question of the day . . . and we must deal with other great evils that affect the general health of the people.—J. Marion Sims, M.D., Presidential Address, American Medical Association, 1876.

Council Statement on Services by Unlicensed Arouses Interest; Action

The statement of policy regarding the practice of medicine by nurses, technicians, etc., adopted by The Council of the State Association on November 21, 1937, (see page 69, January, 1938, issue of *The Journal*), copies of which were distributed to the officers of each component medical society, has been the subject of much discussion at recent meetings of many county medical societies.

In our opinion, The Council when it adopted the statement hoped that this would happen. The subject covered by the statement is important and deserves thorough discussion—action in some instances. We hope all societies will consider the subject.

The reactions of officials of several organizations to which copies of the statement were sent are of interest. We were impressed with the instant willingness of those groups to cooperate with the State Association in remedying a situation which exists in some sections of the state and the sound attitude they took with respect to the principles involved.

The Board of Trustees of the Ohio State Nurses' Association instructed the central office of that organization to distribute copies of the statement to component groups. At the same time, the officers of the nurses' association called to the attention of the State Medical Association the fact that many so-called nurses employed by industry, mercantile establishments and for private nursing duty are not registered nurses and requested the cooperation of medical organization in efforts to improve the quality of nursing care, suggesting that much could be accomplished if physicians would encourage industrial and mercantile concerns and families to use only registered nurses.

Upon receipt of the statement adopted by The Council, the Executive Director of the Ohio Council of Retail Merchants issued a bulletin to his member stores, accompanied by a copy of the statement. His bulletin suggested to store executives that if they are in doubt "as to whether emergency work in your store oversteps legal bounds, it would be advisable for you to get in touch with the officers of your local medical society and get their opinion as to the technical legality of your work". It is hoped that county medical society officers will be cooperative if store executives consult them on this question. It seems to us as if the statement issued by The Council of the State Association can be used as a basis for conferences and negotiations as it is rather complete and thorough.

An interesting sidelight on this general question of medical services by unlicensed persons is a letter from the Director, Medical Research Institute, Detroit (an organization maintained by the United Automobile Workers) to the Wayne County Medical Society, Detroit, and published in the January 10, 1938, issue of *The Detroit Medical News*, reading as follows:

"As you know, the compensation law requires companies to provide the medical service for employees injured at work. The law gives the company the choice of physician. The United Automobile Workers are demanding from all companies that medical and surgical treatment be given only by persons licensed to give medical and surgical treatment.

"One of the large automobile plants has just recently agreed to this demand. Another large automobile corporation will probably have a similar clause in its new contract with the Union.

"The U. A. W. has just made a survey of the medical service supplied in 100 plants operating under the U. A. W. contracts. The survey reveals, particularly in the smaller plants, an unfortunate situation.

"In 23 of the 100 plants, unlicensed first-aid attendants and nurses give medical advice to sick employees who come to the first-aid stations.

"In 33 of the 100 plants first-aid attendants give medicine or drugs to sick or injured employees without consulting a licensed physician.

"In 72 of the 100 plants first-aid attendants give treatment to injuries without consulting a licensed physician.

"Employees injured at work are sent to the following places for treatment (the list adds up to far over 100, because in most plants a man may be sent to one of two or three places, depending upon the time of day or night, and on how serious the injury appears to be):

"a. to a hospital outside the plant, 64.
"b. to a licensed physician outside the plant, 59.
"c. to a first-aid station inside the plant with a licensed physician in attendance, 20.
"d. to a first-aid station inside the plant with a registered nurse in attendance, 33.

"e. to a first-aid station inside the plant with an attendant who is not a licensed physician or nurse, 42.

"Wayne County Medical Society is not enthusiastic about the practice of medicine by corporations. We feel that the Society should be far more perturbed at the practice by unlicensed attendants."

Reports of the recent American Public Welfare Association at Washington reveal that public medical care was the subject of prolonged discussion, ending with the pertinent inquiry: "Where's the money coming from?"

Get Advice From the Wise, Before Signing Service Contracts

Although it is frayed at the edges because it has been used so many times, the warning "investigate before you invest" still is as sound a slogan as the day when it was created. It should be put to work more often by physicians.

We can think of many instances where a physician could have saved himself a lot of grief had he done a little investigating and sought advice before making certain commitments.

We wonder if some physicians wouldn't have prevented complications for themselves if they had discussed with wise colleagues the advisability of accepting offers of employment involving contracts before doing so? There have been some severe kickbacks to commitments which some physicians have made in marketing their services at stipulated sums and under specific agreements.

The following statement issued recently by the Board of Directors of the Cleveland Academy of Medicine contains some excellent advice and provides a possible solution for physicians when they are confronted with a vital problem of this sort:

"Several Academy committees, notably the Economics and the Board of Censors, have been consulted recently by members on several offers of employment involving contracts. In other cases these committees have had brought to their attention existing contracts containing provisions which were potentially dangerous both to the patient and the practitioner. While the Academy, unlike some county medical societies, has no rule requiring its members to submit medical contracts before signing, consultations with the proper committee will many times save physicians embarrassment and more serious difficulties. In practically all cases examined to date, the intentions of both the physician and the other party to the contract were good, but the provisions were so worded as to make possible further difficulties.

"Young physicians having offers of employment are especially urged to consult Academy committees before assuming the obligations of contracts, either written or implied."

Competitive Practice and Monopoly Methods of Service Contrasted

Results testifying to the superiority of independent, competitive medical practice over a bureaucratic monopoly constantly are being revealed to those who are willing to take the time to obtain the facts.

Facts of interest have been uncovered by the *New York State Medical Journal* in connection with the medical service program of the Works Progress Administration in operation in Greater New York.

Until recently, the W.P.A. in Greater New York employed its own physicians to care for workmen injured on W.P.A. projects. At the urging of organized medicine, a switch was made to a panel system which permits the injured workman to select his own physician.

According to information obtained from the W.P.A. compensation officer of that state "results were immediate and striking". Operating costs of the department dropped almost $18,000 a month. "Employes are receiving better medical treatment than before"—to quote the words of the compensation officer. Quoting further: "The average panel physician is more skillful and experienced; he manifests a greater interest and care in his patient, the injured employe has more confidence in his doctor and hence follows instructions, thereby promoting his recovery".

We are not surprised at the above comments as the facts on which they are based are in line with experiences throughout the country.

What is the situation in Ohio? Two splendid examples can be cited.

When the W.P.A. began operations in Ohio, organized medicine was consulted. On its advice, a plan which permits injured W.P.A. employes to select their own physicians was established. That system, still in effect, has worked smoothly and with a minimum of difficulties and complaints. Employes appear to be satisfied. Physicians are being paid promptly, are doing good work, and are not complaining. Administrative officials are well-pleased.

Ohio workmen covered by the Ohio Workmen's Compensation Act have for years had the right to select their own physicians in event of injury. This principle has had the full approval of administrators of the act, placing Ohio in an extremely fortunate position in comparison to workmen's compensation systems in many other states. Even in cases involving employes of concerns listed as "self-insurers", the State Industrial Commission will in unusual cases stand back of an injured workman if the facts substantiate the employe's claim that he is not receiving adequate medical care by the company

physician and desires to consult a physician of his own choice. Ohio's workmen's compensation system is not perfect—never will be. However, it is far superior to those of most states. The medical profession in general is satisfied. Injured employes in general are receiving good medical care. The Commission favors the free-choice policy. In comparison to the enormous number of claims which are handled annually by the department, mistakes and misunderstandings are not many.

Officials of the two governmental agencies mentioned are to be congratulated for being far-sighted enough to see that independent, competitive medical practice is superior in all ways to monopolistic medical service and for their square-shooting. As long as physicians participating in these programs render honest, efficient service, changes in policies and procedures would be a distinct surprise.

Take your part in life's stage and play your part to the end; stand for what is good; be a doer, not a drone; look the world in the face and let the critics criticize.—Thomas Jefferson.

Are Competitive Games in the Schools Too Strenuous?

As a class, physicians are dyed-in-the-wool sport fans. They like their football, basketball, baseball, etc., and many physicians will be found in the rooting section at most any athletic event worthy of attendance.

Because most physicians know sports and also because they know something about the effects of physical exercise, they are in a position to speak advisedly on the health aspects of competitive athletics.

Sometimes we wonder if enough physicians are taking a sincere, active interest in checking up on this situation, especially with respect to competitive athletics among grade and high school youngsters.

In a recent issue of the *Illinois Medical Journal*, a Kewanee, Illinois, physician filed a written protest against the new emphasis being placed on speeding up various games, especially basketball, which is played by more youngsters in all probability than any other game. He pointed out that the speed-up which has been given to basketball will endanger the health of many adolescents, unless substitutions are made at regular intervals and more rest periods allowed.

In our opinion an important point has been raised. It might be advisable for county medical societies in Ohio to discuss this matter with school officials and for individual physicians to advise parents of youngsters engaging in competitive athletics that some restraint should be applied, if possible.

Never let it be said that the medical profession of Ohio wants the younger generation to become a society of pansies and wall-flowers, but, by the same token, it doesn't want Ohio youngsters to become chronic invalids as a result of preventable stress and strain during the important years of adolescence.

I divide the world into three classes—the few who make things happen, the many who watch things happen, and the overwhelming majority who have no notion of what happens.—Nicholas Murray Butler.

He Is Wrong! There's No Gag Rule In Medical Organization

Not long ago an officer of the Ohio State Medical Associaton and one of the yonnger physicians of Ohio engaged in a chit-chat on this and that, including the state of the union, the repression, and — you've guesed it — the status of medicine.

The young physician—a brilliant chap, just starting active practice; well-equipped, and with personality to spare—voiced discontent with the position in which the medical profession finds itself. He leaned quite a bit to the left with respect to socialization of medicine. Moreover, he was quite critical of organized medicine, virtually accusing the American Medical Assoication and its constituent state association of being oligarchies with little excuse for existence.

Obviously, the controversy which ensued put the famous Lincoln-Douglas debates in the amateur class, and ended in a draw.

This, in our opinion, illustrates a condition which must not be dismissed with a shrug. It is a state of affairs which has become in some communities a disquieting problem.

The younger physician who finds himself beset with conflicting emotions, like the chap mentioned here, deserves sympathy, not censure. He needs the advice of his older, wiser and more experienced colleagues. He should be supplied with cold-blooded facts about this question of socialized medicine.

Above all, he should be given an active role in the work of medical organization so that he can gain a better insight of policies and procedures, absorb knowledge, and express his views as to how improvements may be brought about.

Medical organization always has been and always will be democratic and guided by the will of the majority. That there are some within the profession who refuse to take advantage of the opportunities given them to take an active part in its work is not the fault of medical or-

ganization nor an excuse for criticism. Freedom of thought and speech is fundamental in medical organization. It reserves only the right to base its actions on the will of the majority which is as it should be.

Lethargy is bad for any medical society. Let those who believe their society needs awakening, swing into action. More power to them. Improvements never will be accomplished by the shedding of tears and crys of "oligarchy".

When and if the majority of members of medical organization make up their minds that some policy should be tossed out the window and a new one formulated, that is exactly what will be done. Changes are easy to obtain if the reasons for them are convincing and valid. This point particularly we recommend to the physician, young or old, who believes medical organization needs to be streamlined and its policies renovated.

District Workmen's Compensation Boards of Claims Opened in Four Cities

District boards of claims offices of the State Industrial Commission were opened in Cleveland, Toledo, Dayton and Canton, January 1. These boards were established under the provisions of Am. H. B. 235, passed at the regular session of the 92nd Ohio General Assembly. (*The Ohio State Medical Journal*, November, 1937, issue, page 1260).

While physicians may obtain general information concerning the administration of the Workmen's Compensation Act at the district offices, all inquiries regarding specific claims should be addressed to the main office of the Industrial Commission at Columbus, and all claims of injured workmen for compensation and payment for medical treatment must be filed in Columbus as heretofore. The boards of claims are empowered only to investigate, hear and decide claims referred to them by the Commission.

Addresses of the district offices are: Cleveland, B. of L. E. Building, Ontario Street; Toledo, Richardson Building, corner Jefferson and St. Clair Streets; Dayton, Elks' Building, corner Jefferson and E. Third Streets; and Canton, East Ohio Gas Company Building, corner Second and Dewalt Avenue N. E. Officers of the Commission will serve the Columbus district.

Open New Offices

Physicians who have recently established new locations in Ohio include the following: Dr. Walter Herrman, Portsmouth; Dr. Russell E. Taylor, Sandusky; Dr. Paul J. Lee, Lucas; Dr. Thurman F. McAllister, Coshocton; Dr. Robert L. Gettman, Marion, and Dr. Beecher L. Smith, Columbus.

THE "430" BULL

Four hundred thirty physicians true
Delivered a "bull" for me and you.
Its horns are polished; it wears red flannels;
It wasn't born through reg'lar channels.

This "bull" is a sport, but "expert" feed
Will replace pedigree, if it should breed.
Perhaps it has merit. Now, what's your belief?
It seems to have beauty where it ought to have beef.

But many are thinking it rather funny
To see a "bull" that asks for money.
Athough a free barbecue always attracts us,
Watch out for the "bull"; it may mean higher taxes.

—*Cleveland Academy Bulletin.*

Public Lectures on Medicine Being Given By Cleveland Academy

The Eighth Annual Series of "The Holden Lectures in Medicine", free Sunday afternoon public health lectures, offered to the public under the joint auspices of The Academy of Medicine of Cleveland, the Albert Fairchild Holden Foundation, Western Reserve University, and the Cleveland Medical Library Association, at the Allen Memorial Medical Library Auditorium, Adelbert Road at Euclid Avenue, Cleveland, was opened January 30, with an address on "Restoring Health by Heat, Exercise, Light and Electricity", by Dr. John S. Coulter, Chicago, associate professor of physical therapy, Northwestern University Medical School.

On February 13, Dr. Charles L. Hudson, Cleveland, clinical instructor in medicine, Western Reserve University, School of Medicine, will speak on "Eat, Drink and Be—Fat". The subject for discussion Sunday afternoon, February 27, is "What Is Known About Infantile Paralysis". Dr. John A. Toomey, Cleveland, associate professor of pediatrics, Western Reserve University School of Medicine, will talk on the early stages of the disease, and the correction of late effects will be discussed by Dr. Maxwell Harbin, Cleveland, assistant professor of orthopedic surgery at the University. All programs will begin at 3 P.M. Doors will be opened at 2:30 P.M.

Toledo—Radio speaking engagements of members of The Toledo Academy of Medicine during December were: "The Early Diagnosis of Cancer", by Dr. C. L. McKibben; "The Treatment of Cancer", by Dr. C. E. Hufford; "Over-Eating", by Dr. Raymond J. Borer, and "Choosing Your Physician", by Dr. A. P. Hancuff.

HOTEL RESERVATIONS FOR 1938 ANNUAL MEETING, COLUMBUS, ON MAY 11 AND 12 SHOULD BE MADE IMMEDIATELY

HOTEL reservations should be made promptly by members of the Ohio State Medical Association who are planning to attend the Ninety-Second Annual Meeting at Columbus, Wednesday and Thursday, May 11 and 12, 1938.

The Neil House has been designated as the headquarters hotel. All sessions will be held there, and it will house the Scientific Exhibit, Technical Exhibit, Hobby Show and Registration Headquarters.

An unusually large attendance is anticipated at this meeting. While Columbus is noted for its fine hotel facilities, physicians planning to attend the meeting should request reservations promptly in order to secure the accommodations desired.

Requests for reservations should be mailed directly to the hotel selected.

Following is a list of Columbus hotels and their room rates:

NAME AND LOCATION	No. of Rooms	Single	Double	Double Twin Beds	Suites
NEIL HOUSE (Headquarters Hotel) 35 South High St.	665	$3.00–5.00	$4.50–6.00	$5.00–7.00	$7.00 and up
DESHLER-WALLICK Broad and High Sts.	1000	3.00–7.00	4.50–10.00	5.00–10.00	8.00 to 18.00
FORT HAYES 31 W. Spring St.	350	2.00–3.50	3.50–6.00	4.00–8.00	7.00 to 18.00
CHITTENDEN High and Spring Sts.	275	2.00–3.00	3.00–4.00	3.50–6.00	
SENECA 361 E. Broad St.	250	2.00	3.00 and up	4.50–6.00	5.00 and up
SOUTHERN High and Main Sts.	250	2.00–3.00	3.00–4.00	4.00–4.50	
VIRGINIA Third and Gay Sts.	150	2.00 and up	3.00 and up	4.00 and up	5.00 and up
BROAD-LINCOLN 631 E. Broad St.	140	2.00 and up	3.00 and up	4.50 and up	3.50 and up

HOTEL RESERVATION BLANK

Mail this coupon to hotel selected

Manager ..... Hotel, Columbus, Ohio.

You are requested to reserve the following accommodations during the period of the Annual Meeting of the Ohio State Medical Association, May 11-12, 1938, or for such other period as may be indicated herein.

☐ Single Room with bath ☐ Double Room with bath Price: .....

☐ Twin Bed Room with bath ☐ Suite

Arriving May ..... at ..... A.M. ..... P.M.

PLEASE VERIFY MY RESERVATION.

Name .....

Address .....

.....

MEDICAL LICENSES GRANTED 55 WHO TOOK RECENT STATE BOARD EXAMINATIONS; RESULTS OF PROSECUTIONS CITED

LICENSES to practice medicine and surgery in Ohio were granted 55 medical school graduates who passed the December examinations, at a meeting of the State Medical Board at Columbus on January 4.

The board also granted certificates to 4 osteopaths, 3 chiropractors, 7 chiropodists, 8 mechanotherapists, 1 electro-therapist, 4 cosmetic-therapists and 29 masseurs.

The following officers were elected by the Board for the ensuing year: Dr. Floyd S. Meck, Cleveland, president; Dr. L. T. Franklin, Chillicothe, vice-president; Dr. H. M. Platter, Columbus, secretary, and Dr. Carl W. Dewey, Conneaut, treasurer.

Professor S. E. Rasor and Miss Clara F. Brouse, were re-appointed entrance examiner and chief nurse examiner, respectively.

PROSECUTIONS CITED

Dr. Platter reported the following results of prosecutions instituted by the board:

Zene Tozer, Wm. C. Crichton and F. Nina Bellinger, unlicensed chiropractors, Akron, indicted by the Common Pleas Court of Summit County, 1936, advertising and announcing, tried July, 1937, each fined $300 and costs, collectible in January, 1938, if not licensed by that time.

G. H. Bellinger, Akron, unlicensed chiropractor, advertising and announcing, indicted, Common Pleas Court of Summit County, continued because of ill health.

Frank A. Doughty, Dayton, unlicensed chiropractor, advertising and announcing, left state.

T. J. Bowers, Columbus, unlicensed naprapath, illegal practice of medicine, fined $50 and costs, February 25, Columbus, in Municipal Court.

Minnie J. Sperling and W. A. Sperling, Dayton, unlicensed chiropractors, advertising and announcing, each fined $25 and costs, in Dayton Municipal Court.

Minnie B. Guenther, Cleveland, unlicensed, illegal practice, fined $100 and costs—$75 suspended and put on probation, Cleveland Municipal Court, March 30.

T. E. Leonard, Columbus, unlicensed naprapath, illegal practice of medicine, fined $25 and costs, Columbus Municipal Court, March 9.

David Shaw, Cincinnati, unlicensed chiropractor, advertising and announcing, fined $25 and costs, Cincinnati Municipal Court, July 23.

Wm. C. DeBenis, Cincinnati, unlicensed chiropractor, advertising and announcing, fined $25 and costs, Cincinnati Municipal court, July 23.

Sam W. Lind, Cincinnati, unlicensed chiropractor, advertising and announcing, fined $25 and costs, Cincinnati Municipal Court, September 28.

T. M. Quilter, Sandusky, unlicensed chiropractor, found guilty of opening and conducting an office, fined $25 and costs, May 24, appealed.

Clifton Engel, Sandusky, unlicensed chiropractor, found guilty of opening and conducting an office, fined $500 and costs—$250 remitted on condition that objectionable practice and advertising be discontinued and that a fine of $50 for a previous offense be paid, July 21.

Richard C. Geilus, Ashtabula, illegal practice of medicine, fined $100 and costs, Ashtabula Municipal Court, July 1.

Mae Jerome, Ashtabula, indicted and found guilty of illegal practice of medicine, Ashtabula County Common Pleas Court, fined $500 and costs, $450 suspended on condition that she leave the state, November 17.

Richard C. Geilus, Ashtabula, indicted by grand jury, found guilty of illegal practice of medicine, fined $500 and costs—$450 suspended on condition that he leave the state, November 17.

Lillian Rankin, Huron County, illegal practice of medicine, pleaded guilty, Common Pleas Court of Huron County, fined $25 and costs, suspended on promise to quit, August 4.

Alex F. Ward, Cincinnati, indicted by grand jury, illegal practice of medicine and illegal advertising, found guilty on each count, sentence not yet reported, September 30.

David Shaw, Cincinnati, unlicensed chiropractor, illegal advertising, Municipal Court, Cincinnati. fined $50 and costs, August 26.

Virgil D. Good, Cincinnati, unlicensed chiropractor, illegal advertising, Cincinnati Municipal Court, fined $25 and costs, November 4.

William C. DeBenis, Cincinnati, unlicensed chiropractor, illegal advertising, Cincinnati Municipal Court, fined $50 and costs, November 26.

M. O. Welch, Columbus, unlicensed naprapath, left state.

C. J. Wohlgemuth, Columbus, unlicensed naprapath, illegal advertising, Columbus Municipal Court, fined $200 and costs, October 8, appealed.

T. E. Leonard, Columbus, unlicensed naprapath, illegal advertising, Columbus Municipal Court, fined $200 and costs, October 8, appealed.

Minnie B. Guenther, Cleveland, illegal practice of medicine, Cleveland Municipal Court, fined $25 and costs, suspended on promise to quit.

F. J. Bayer, Canton, illegal practice, case pending.

Jack Marmer, Cincinnati, chiropodist, illegal advertising, Cincinnati Municipal Court, fined $25 and costs, suspended on promise to quit, August 27.

J. Pos, Circleville, illegal practice of medicine, indicted by grand jury, indictment defective, left state, September 8.

Alfonsa Babla, Columbus, illegal practice of medicine, Columbus Municipal Court, fined $500 and costs, suspended on condition he leave state.

J. C. Carmell, Clarence C. Cox, Robert E. Cox, Hugh T. Pennell, James R. Couch and Bruce A. Tanner, Columbus, unlicensed naprapaths, illegal advertising, Columbus Municipal Court, each fined $200 and costs, appealed, December 1.

E. G. Frohnapfel, Dover, unlicensed chiropractor, Dover, mayor's court, fined $50 and costs.

C. C. Wedge, Lancaster, magnetic healer, illegal practice of medicine, indicted by grand jury, June, 1936, trial jury disagreed, December, 1937.

THOSE LICENSED

The highest grade in the December examinations was made by Dr. Harold S. Schiro, Cincinnati, graduate of Johns Hopkins University

School of Medicine, with 89.6 per cent. Dr. John S. Hatch, Columbus, Harvard University Medical School, was second with 87.4 per cent, and Dr. Ulysses G. Mason, Jr., Cleveland, University of Chicago School of Medicine, was third with 86.9 per cent.

Those granted medical and surgical licenses following examination were: Robert E. Traul Middleburg, Ohio State University; Herbert J. Fox, Cleveland, Duke University; Edward A. Spisak, Cleveland, Georgetown University; Elizabeth Y. Kuffner, St. Marys, George Washington University; Jack W. Arnold, Bucyrus, Conrad K. Slippinger, Dayton, James J. Colavita, Cincinnati, Edward H. Connor, Cleveland, Charles W. Ohl, Cleveland, Paul F. Overs, Lodi. George P. Tsorvas, Cleveland, Joseph F. L. Bilotta, Cleveland, Charles H. Robinson, (deceased), Columbus. Charles S. Sherman, Cleveland, Hahnemann Medical College; John S. Hatch, Columbus, James F. Jones, Cleveland, Harvard Medical School; Frederick M. Kenan, Upper Sandusky.

John D. LeFevre, Springfield, Joseph A. Ralston, Martins Ferry, James T. Stephens, Cleveland, Thomas Densmore, Girard, Jefferson Medical College; Harold S. Schiro, Cincinnati, Johns Hopkins University; Edward W. Keefer, Cleveland, Harry R. Barr, Cleveland, Alexander J. Wysocki, Cleveland, New York Medical College and Flower Hospital;

James H. Beaton, Dayton, Northwestern University; Louis V. Ferrara, Toledo, Harvey C. Gunderson, Cincinnati, Rush Medical College; Frederick L. Englerth, Dayton, Everett L. Phelps, Toledo, Temple University; William Perilman, Cincinnati, University of Arkansas; Paul C. Foster, Columbus, Karl P. Klassen, Columbus, Ulysses G. Mason, Jr., Cleveland, Estelle T. Milliser, Columbus, University of Chicago; Harold J. Wenzinger, New Bavaria, University of Louisville;

Edward Kope, Canton, University of Michigan; Glenn H. Walker, Columbus, University of Nebraska; Justin M. Hope, Cleveland, University of Pennsylvania; Richard H. Sloan, Marietta, University of Rochester; Laura C. Bickel, Cincinnati, University of Wisconsin; Louis Ravin, Toledo, Wayne University; Brock E. Brush, Toledo, University of Western Ontario; Hans Weinberg, Columbus, Hamburg University, Hamburg, Germany;

Joseph Portaro, Cleveland, Royal University of Genoa, Genoa, Italy; Max Levy, Cleveland, Trinity College, Dublin University, Dublin, Ireland; Hans Lion, Cincinnati, Hilde Marie Elizabeth Hensel-Pinkus, Toledo, University of Berlin, Berlin, Germany; Ernest C. Orosz, Cleveland, University of Budapest, Budapest, Hungary;

George L. Beer, Cleveland, Fritz Kauffmann, Cleveland, University of Munich, Munich, Germany; Andrew C. Ippolite, Dillonvale, University of Naples, Naples, Italy; Sam S. Chudde, Jr., Dayton, University of Vienna, Vienna, Austria; Berta Wechsler, Columbus, University of Wurzburg, Wurzburg, Germany, and Frederick E. Roach, Cleveland, Harvard Medical School.

Licenses to practice medicine and surgery in Ohio were granted by the Board, through reciprocity to the following physicians, numbering 30:

Jerry E. Arrington, Springfield, University of Tennessee; Henry A. Brunsting, Toledo, University of Michigan; Neal D. Carter, Marion, Indiana University; Myron E. Crawford, Cleveland, St. Louis University; David J. Dugan, Cleveland, St. Louis University; Lin S. Felder, Cincinnati, Medical College of State of South Carolina; Frank J. Fischer, Chagrin Falls, University of Wisconsin; Leo E. Hayes, Sandusky, Medical College of Virginia; Robert R. Hays, Akron, Jefferson Medical College; Maurice A. R. Hennessy, Cleveland, St. Louis University; William J. Holmes, Warren, Rush Medical College, University of Chicago; Frederick S. Hosking, Cleveland, McGill University.

Everett O. Jeffreys, Columbus, Washington University; Henry K. Montgomery, Dayton, University of Arkansas; Clayton T. Noonan, Cleveland, University of Pennsylvania; Joseph E. O'Brien, Columbus, Northwestern University; Frank J. O'Dea, Cleveland, Georgetown University; Carl G. Opaskar, Cleveland, St. Louis University; Arthur A. Pimsner, Cleveland, Emory University; Charles M. Smith, Portsmouth, Vanderbilt University; Paul E. E. Smith, Canton, Georgetown School of Medicine; Frank X. Stukenborg, Toledo, St. Louis University; Joseph Uttel, Alliance, Jefferson Medical College; Loyd H. Marshall, Niles, St. Louis University; Bernard R. Bonnot, Canton, St. Louis University; Michael L. Matteo, Wickliffe, St. Louis University; Robert F. Koors, Dayton, St. Louis University; Eunice M. Christensen, Everett D. Christensen, College of Medical Evangelists.

Handbook of Eye Hazards in Industry Available at Special Reduced Price

To secure wider distribution of its book on "Eye Hazards in Industrial Occupations" by Louis Resnick and Lewis H. Carris, the National Society for the Prevention of Blindness is now offering copies at the special price of 50 cents each as long as the supply lasts. This book, which sold formerly at the actual cost price of $1.50, was published in 1924. Although some of the photographs show safety devices which have since been improved upon, the contents remain a valuable guide to safe practices in industry.

"Eye Hazards in Industrial Occupations" is a handbook for safety engineers, safety inspectors, safety committeemen, industrial physicians and nurses; for those responsible for industrial operations, whether owners, managers, or members of the operating staff; for governmental officials, trade association executives, and social agency officers; and for the many others who share the responsibilities and opportunities for conserving the life, health and sight of the millions of men, women and children employed in industry.

The volume contains 247 pages, and includes 59 illustrations dealing with the safeguarding of eyesight in factories, mines, shops and offices. Orders or inquiries concerning this volume should be addressed to the National Society for the Prevention of Blindness, 50 West 50th Street, New York City.

IN MEMORIAM

Paul Wallace Bailey, M.D., Akron; Northwestern University Medical School, Chicago, 1923; aged 40; died December 23. Following internship at Cincinnati General Hospital, Dr. Bailey served in the South for two years in the United States Public Health Service. He had practiced in Akron for the past ten years. His widow, a son, his parents, five sisters and a brother survive.

Lyman E. Baker, M.D., Mechanicsburg; Cleveland Medical College, Homeopathic, 1895; aged 69; died December 23. Dr. Baker practiced in Mechanicsburg for over 40 years. He was a member of the Methodist Church, the I.O.O.F., Modern Woodmen of the World, Rebekah Lodge and the Lions Club. Surviving are his widow, a daughter, a son, a sister and a brother.

Peter D. Bixel, M.D., Pandora; Eclectic Medical College, Cincinnati, 1901; aged 73; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 2. Dr. Bixel practiced in Pandora, Putnam County, for 37 years. Prominent in civic affairs, he was president of the County Board of Health, the County Republican Executive Committee, the Bluffton Community Hospital Staff. He had also served as coroner of Putnam County. At its session January 4, the Ohio Senate adopted a resolution extolling Dr. Bixel's professional and civil service to his community. His widow, a daughter, a son—Dr. Munsel R. Bixel, Bluffton, a sister and five brothers survive.

Rufus Henry Finefrock, M.D., Prospect; Starling Medical College, Columbus, 1896; aged 67; died January 12. Dr. Finefrock practiced in Prospect for 42 years. He served as state senator from the 13th-31st senatorial districts, 1910-1914. Dr. Finefrock was a member of the Methodist Church and Masonic Order. His widow, a daughter and a brother survive.

John H. Gerhardt, M.D., Sunbury; Columbus Medical College, 1882; aged 80; member of the Ohio State Medical Association and the American Medical Association; died December 30. Dr. Gerhardt practiced for nearly 60 years. His first location was in Hebron, and in 1884 he was appointed physician at the Ohio Penitentiary. For the past 50 years, he had practiced in Sunbury. He was a member of the Delaware County Board of Health. Prominent in the Masonic Order, Dr. Gerhardt was secretary of the Sparrow Lodge at Sunbury for 37 years. He had been a deacon of the Baptist Church for over 35 years. His widow survives.

P. Calvin Hartford, M.D., East Palestine; Western Reserve University School of Medicine, 1887; aged 76; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 3. Dr. Hartford first practiced in Negley, but had been located in East Palestine since 1896. Active in the practice of his profession, he also had extensive business interests. Four brothers survive.

Joseph Morton Howell, M.D., Oakland, California; Starling Medical College, Columbus, 1885; aged 75; former member of the Ohio State Medical Association and the American Medical Association; died December 27. Dr. Howell practiced in Dayton for 35 years, prior to becoming U. S. Minister to Egypt in 1921, a post which he held for six years. He had served as Dayton city health commissioner and was a member of the State Board of Health during the administration of Governor Frank B. Willis. Dr. Howell was a member of the Masonic Order and the Methodist Church. His widow, a son and a daughter survive.

Robert Edgar Hughson, M.D., Yorkville; Ohio State University College of Medicine, 1931; aged 35; former member of the Ohio State Medical Association and the American Medical Association; died December 21. Dr. Hughson had practiced in Toledo for several years before locating in Yorkville. His widow and his mother survive.

John Emerson Hunter, M.D., Greenville; Cincinnati College of Medicine and Surgery, 1891; aged 77; member of the Ohio State Medical Association, Fellow of the American Medical Association and member of the Associated Anesthetists of the United States and Canada; died December 29. Dr. Hunter retired last Fall after having practiced in Greenville for over 40 years. An active member of the Darke County Medical Society, he was a Councilor of the Ohio State Medical Association from May 5, 1915, to May 31, 1920. Surviving are a daughter and a son, Dr. Matthew Hunter, Alexandria, La.

John Wesley Irvin, M.D., Wooster; Jefferson Medical College of Philadelphia, 1886; aged 78; former member of the Ohio State Medical Association and the American Medical Association; died December 20. Dr. Irvin retired a few years ago because of ill health. He had practiced in Ashland for four and a half years, in Magnetic Springs for about the same length of time, in Creston for 14 years, and since then in Wooster. Dr. Irvin was a member of the Methodist Church, the Masonic Order and the Lions Club. His

widow, a son, two sisters and two brothers survive.

Willard C. Kendig, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1891; aged 69; former member of the Ohio State Medical Association and the American Medical Association; died December 25. Dr. Kendig practiced in Cincinnati for 46 years. Formerly assistant superintendent of the Longview State Hospital, he had been examining psychiatrist of the Hamilton County Probate Court for 28 years.

Asa Clay Messenger, M.D., Xenia; Medical College of Ohio, Cincinnati, 1884; aged 77; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 3. After practicing at Coalton for seven years. Dr. Messenger was appointed resident physician at the Ohio Soldiers and Sailors Orphans' Home at Xenia by Governor William McKinley in 1892. In 1903 he opened an office at Xenia for the general practice of medicine. Dr. Messenger organized the Volunteer Medical and Surgical Staff of the state institution, and was its secretary for 33 years. Ever active in behalf of organized medicine, Dr. Messenger had served twice as president of the Greene County Medical Society, president of the Second Councilor District, alternate delegate of the Ohio State Medical Association to the American Medical Association for 19 years, and president of the Miami Valley Health Officers' Association. He was also prominent in civic affairs, having been the first president of the Greene County Automobile Club, first president of the Xenia Masonic Club, president of the Y.M.C.A. Board and president of the Masonic Temple Association. Dr. Messenger was a member of the Masonic Order, the J.O.U.A.M., and the Presbyterian Church, in which he had been a ruling elder for 43 years. Surviving are his widow, two daughters, a son—Dr. H. C. Messenger, Xenia, and two sisters.

Katharine Rebecca Moses, M.D., New Harrisburg; Ohio Medical University, 1900; aged 68; member of the Ohio State Medical Association, the American Medical Association and the American Psychiatric Association; died December 16. Dr. Moses was on the staff of the Cleveland State Hospital until her retirement because of ill health in March, 1937. A brother survives.

Joseph S. Niederkorn, M.D., Versailles; Eclectic Medical College, Cincinnati, 1887; aged 72; member of the Ohio State Medical Association and the American Medical Association; died December 28. Dr. Niederkorn had practiced in Versailles for 50 years, after having been in Russia, Ohio, for one year. A former member of the village council, he was mayor from 1932 to 1936. Dr. Niederkorn was a member of the Catholic Church and the Knights of Columbus. Surviving are his widow, two sons—one of whom is Dr. Paul J. Niederkorn, Versailles, and four daughters.

Ida Belle Rulison, M.D., Cincinnati; Eclectic Medical College, Cincinnati, 1890; aged 84; died December 20. Dr. Rulison was the widow of former Hamilton County Prosecutor Hiram Rulison. She never practiced medicine, but was a member of the Ohio State Medical Association from 1910 to 1917.

John C. Ryder, M.D., Eaton; Hahnemann Medical College and Hospital of Philadelphia, 1894; aged 69; member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 17. Dr. Ryder practiced in Eaton for 40 years. He was a member of the village board of public affairs, and had also served on the Board of Education. His widow and two sisters survive.

Peter S. Smigel, M.D., Cleveland; Western Reserve University School of Medicine, 1894; aged 65; member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 2. Dr. Smigel entered general practice in the southeast section of Cleveland in 1895, being the first Polish-speaking physician to locate there. He practiced on the East Side for many years. Dr. Smigel was a member of the Medical and Dental Arts Club, of which he was the founder. Two daughters survive.

Rupert Lyle Turrell, M.D., Cleveland; New York University Medical College, 1892; aged 74; former member of the Ohio State Medical Association and the American Medical Association; died December 19. Dr. Turrel was vice-president and member of the staff of the East End Hospital in Cleveland, where he had practiced for five years, after having been in Conneaut for 30 years. He was a member of the Catholic Church. His widow and a brother survive.

Robert Ellsworth Wells, M.D., Nashport; University of Michigan Medical School, Ann Arbor, 1907; aged 53; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 3. Dr. Wells practiced at Wexford, Michigan, for two years, and during the World War served overseas in the Medical Corps of the U. S. Army. Following the war, he opened an office in Nashport and continued there until his death. His widow, a son, two sisters and two brothers survive.

Theodore Miles Wittkamp, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1902; aged 59; died December 19. Dr. Wittkamp practiced in Cincinnati for 35 years. Surviving are his widow, his father, Dr. Theodore M. Wittkamp, a son and a sister.

THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

The Outward Room. By Millen Brand. Simon and Schuster, New York, 1937.

This book is a best seller because it is another morsel for ever-hungry Freudophiles. Its sponsors assure the reader that its author was painstaking in his desire to be authentic.

Only a psychoanalyst can say that it has "factual accuracy". It is utterly devoid of plausability, the psychosis, if any, being nicely synthesized for an appropriate denouement in the last chapter.

The leading character, a young woman, escapes from a state institution which is described with a malignantly biased eye. Reaching a distant city by riding a "most unauthentic" contrivance under the rear platform of a Pullman car, she takes up life with a monosyllabic, athymic male in a run-down neighborhood, with a Dickensoid back-drop and an atmosphere continually impregnated with the odor of urine. A jerky libido with this man, a dash of trade-union ideology, bleak poverty, and finally re-experiencing with her mate a tragedy identical with her own original one, serve to purge her of her mental disease.

The writer spent too much time lying on a Freudian couch and has brooded too much over mental murals which are better done in oils by Diego Rivera.—L. J. Karnosh, M.D.

Dextrose Therapy in Everyday Practice. By E. Martin, Sc. D. $3.00; Paul B. Hoeber, New York, 1937; pp. 451.

This book which covers the whole subject in a practical way should be in every physician's library since the subject enters every phase of medical practice.

Your Diet and Your Health. By Morris Fishbein, M.D. $2.50; McGraw-Hill Book Company, New York City, 1937; pp. 298.

The author succeeds in clearing the minds of his readers of the confusion that is prevalent regarding diet and nutrition. He succeeds in debunking many fads. Especially valuable is the story of vitamins. All the 26 chapters are well organized, smoothly written and therefore easily assimilable.

Christianity and Sex. By Richard C. Cabot, M.D. $1.00. The Macmillan Company, New York, 1937; pp. 78.

A discussion of sex and marriage from the viewpoint that advice, instruction or knowledge is all to no end unless the advice "seek ye the Lord" is made the basis of conduct. Of especial interest are the chapters on "Consecration of the Affections" and "The Re-enforcement Available." The author's discussion on difference between "telling them" and "educating them" can be most happily applied to so many of our social problems.

Twenty-five Views of Health Progress. By L. I. Dublin, Ph.D., statistician to the Metropolitan Life Insurance Company, and Alfred J. Lottse, D.Sc., assistant statistician. Metropolitan Life Insurance Company, New York, 1937. pp. 613.

This is a study of the mortality experience among the industrial policyholders of the Metropolitan Life Insurance Company from 1911 to 1935. Involving as it does an experience with millions of lives, it must be given a place in every library dealing with sickness and death.

A Primer for Diabetic Patients. By Russell M. Wilder, M.D., $1.75. Sixth edition. W. B. Saunders Company, Philadelphia, Pa., 1937; pp. 191.

The development of protamine zinc insulin has caused another edition of this most valuable manual for the diabetic patient. The word represents the efforts towards the education of patients of the Mayo Clinic for the past 16 years.

Textbook of Diagnostic Roentgenology. By Lewis J. Friedman, director Roentgen-Ray Department, Bellevue Hosiptal. D. Appleton-Century Company, New York, 1937; pp. 623.

This is the best one-volume text which has so far come to my attention. It is complete, up to date, and thoroughly informative of all practical phases of the subject. It will prove especially serviceable to the physician who does some of his own X-ray work.

From Wheat to Flour. By Josephine Brandenburg Beardsley. The Wheat Flour Institute, 309 W. Jackson Blvd., Chicago. 1937; pp. 39.

A most attractive and graphic primer presenting the story of white flour from the planting to the purchase of the finished product.

Socialized Medicine in the Soviet Union. By Henry E. Sigerist, M.D., director, institute of medical history, Johns Hopkins University. $3.50. W. W. Norton and Company, New York City, 1937; pp. 378.

This is a most interesting and stimulating book, carefully documented and containing 53 pages of appendices setting forth the working of Soviet Medicine. The author insists upon the knowledge of the economic background. Even

the most conservative mind can read it therefore with profit and without raising his blood pressure. The author makes the necessary sharp distinction between attempted socialization under capitalism and true socialist medicine. No one can miss being impressed with the documental data on the results so far obtained in the complete wiping out of smallpox, which was raging in 1920 with more than 150,000 reported cases, the creation of 480 health reports practically from scratch, the decrease of morbidity from many diseases to about 1-5. Most striking has been the fight on venereal disease. One thousand dispensaries were created, with the result that the incidence of primary syphilis in cities where it is worst dropped from 25.7 per 10,000 in 1913 to 1.8 in 1935. The liquidation of prostitution was a great contributing factor.

A Handbook of Accepted Remedies, Symptoms and Treatment of Poisoning, Diagnostic Procedures, and Miscellaneous Information. Edited P. J. Hanzlik, M.D. Second edition. $1.00. J. W. Stacey Inc., San Francisco. 1937; pp. 117.

One of the best manuals for the resident staff of a hospital which has come to our attention. This new edition brings it right up to date—allantoin and urea for wounds, sulfanilamide and all.

The Modern Home Medical Adviser. Edited by Morris Fishbein, M.D. $2.49. Garden City Publishing Co., Inc., Garden City, New York, 1937; pp. 906.

The editor has assembled a superb list of contributors who have covered the questions concerning all the common, and even some of the unusual illnesses that may develop in any family. This is a book which every physician can with profit put on the library table of his own home for the instruction of his own family. He can well use it himself as a model if he is called upon to make a talk to laymen about medicine.

The Mechanism of Heat Loss and Temperature Regulation. 1937 Lane Medical Lecture. By Eugene F. DuBois, M.D. Cloth $2.25; paper $1.50. Stanford University Press. pp. 95.

These five lectures on this important phase of clinical physiology by the master of the subject. It is recommended to all physicians as a correlated summary of the 24 years of research on this subject by the author and his associates at the Russell Sage Institute of Pathology.

Fever Therapy. Abstracts and Discussions of Papers Presented at the First International Conference on Fever Therapy. By Walter M. Simpson, M.D., and William Bierman, M.D. $5.00. Paul B. Hoeber, Inc., New York, 1937; pp. 483.

In this volume is shown what enormous strides have been made in the last few years by presenting abstracts of proceedings of the First International Conference in French, German, and English, with discussions in English. It demands a place in every medical library and on the shelves of all who are interested in this form of therapy.

Appendicitis. A Clinical Study. By W. H. Bowen, M.A., M.S., F.R.C.S., examiner in surgery, University of Cambridge. $2.50. University Press, Cambridge. The MacMillan Co., New York, 1937; pp. 202.

This book should have a wide appeal among physicians. The reviewer is impressed with the definite statement as to the indications for surgery in chronic appendicitis, with a very convincing analysis of a series of cases with no recurrence of symptoms for several years after operation. Then, too, the discussion of radiologic studies should be read by every radiologist and man in general medicine. A very worthwhile little monograph.

From Friendship to Marriage. By Roy A. Burkhart. $1.50. Harper Brothers, 1937; pp. 161.

This volume is presented as a guidebook for those who would build for a happy and permanent marriage by giving a frank discussion of the boy and girl relationship from adolescence to maturity, and the establishment of a home. Another useful volume which should be in the "lending library" of the medical man who assumes the role of a personal physician to young people.

The Man Takes a Wife. By Ira S. Wile, M.D. $2.50. Greenburg, New York City, 1937; pp. 276.

This well known authority in the fields of social hygiene, psychiatry and education, presents here a study of man's problems in and through marriage. The author has succeeded in helping his reader to understand himself in relation to his wife and children.

The Negro's Struggle for Survival. By S. J. Holmes, professor of zoölogy in the University of California. $3.00. The University of California Press, 1937; pp. 296.

The biological trend of the American Negro is of importance to every person in the United States. This volume is a definite contribution to exposition of this trend. Every physician should read this scholarly work. The title of the chapters will indicate its scope: The Inter-Racial Struggle for Existence; The Growth of the Negro Population; The Stabilized Rate of Natural Increase Among the Negro Population; The Trend of Negro Mortality; The Selective Action of Disease; Infant Mortality; The Negro Birth Rate; Will the Whites Absorb the Blacks? Negro Migration and Its Biological Effects.

Patent Medicine Firms Prosecuted

Among the prosecutions recently announced by the Federal Food and Drug Administration, were the following Ohio concerns involving patent medicines that did not conform to the represented standards: Erie Laboratories, Cleveland, six preparations for hay fever, indigestion, bladder disorders and other conditions, fined $150 and costs; Gall-Flo Laboratories, Inc., Cleveland, "Gall-Flo" for ailments of livestock, $100 and costs; Hi-Test Laboratories, Inc., Cleveland, "Dr. Grabill's Prescription," a product containing cinchopen, for rheumatism, sciatica, neuralgia, lumbago, sore muscles, neuritis, arthritis and gout, fined $100 and costs; and Lawrence-Williams Co., Cleveland, "Lawrence Caustic Balsam" for ailments of horses and cows, $200 and costs.

Examination for Navy Medical Corps

An examination of candidates for appointment as Lieutenant (junior grade), in the Medical Corps of the Navy, will be held at all Naval Hospitals in the United States and at the Naval Medical School, Washington, D. C., beginning May 16, 1938. Candidates for admission must be between the ages of twenty-one and thirty-two years at time of appointment, graduates of Class "A" medical schools, and have completed an internship of one year in a hospital accredited for interns by the American Medical Association and the American College of Surgeons. Those who are interested should write the Surgeon General, U. S. Navy, Bureau of Medicine and Surgery, Navy Department, Washington, D. C., for further information in regard to the examination and the procedure to follow for them to appear before one of the Examining Boards.

Refresher Course for Army Physicians

Plans are being made for the opening of a 10-week "refresher" course in medical training and advanced research methods for members of the Medical Corps of the United States Army in the Cincinnati area. Instruction will be given by members of the University of Cincinnati College of Medicine at the college on Wednesdays, from 9:00 A.M. to 10 P.M., January 26 to March 30. Rear Admiral P. S. Rossiter, surgeon general for the U. S. Navy, has accepted an invitation to appear on the program March 16. Active duty credit hours will be granted medical reserve officers for attendance at the school. Arrangements for the course were made by Lieut. Col. M. M. Kimmel, Coast Artillery Corps, United States Army, executive officer of the Cincinnati Military District; Colonel C. C. Demmer, Medical Corps of the U. S. Army, post surgeon at Fort Thomas, Ky., and Colonel Robert D. Maddox, Medical Reserve Corps district surgeon, Cincinnati Military District.



EXERCISE

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The patient who is unable to exercise or adhere to a suitable diet will appreciate the aid of Petrolagar to maintain a regular bowel movement. Petrolagar softens hard stools and assists the bowel to function normally. Its pleasant flavor, devoid of the oily taste associated with plain mineral oil, makes Petrolagar very easy to take. Prescribe Petrolagar for bowel management, it's "Council Accepted." Petrolagar Laboratories, Inc. • Chicago, Ill.

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ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: PARKE G. SMITH, M.D., CINCINNATI)

BUTLER

At a meeting of the Butler County Medical Society, Thursday afternoon, January 13, Dr. E. M. Huston, Dayton, past-president of the Ohio State Medical Association, spoke on the subject, "Why Be Interested in a County Medical Society".

Dr. H. F. Plaut, Cincinnati, spoke on "X-ray and Radium Treatment of Malignant Tumors", at a meeting of the society, December 10.—Mildred White Gardiner, M.D., secretary.

CLINTON

Eighteen members of the Clinton County Medical Society met at the General Denver Hotel, Tuesday noon, January 4. Following luncheon and a business session, Dr. William L. Wead, Sabina, and Dr. L. H. Fullerton, New Vienna, presented interesting papers on "The Diagnosis and Treatment of Early Syphilis". The subject was fully discussed by the members present. —Elizabeth Shrieves, M.D., Correspondent for *The Journal.*

HAMILTON

The following programs were presented by the Academy of Medicine of Cincinnati during January:

January 11—"The Use of Sulfanilamide or Its Derivatives in the Treatment of Certain Infectious Diseases", by Dr. Perrin H. Long, Baltimore, Md., associate professor of medicine, Johns Hopkins University Medical School.

January 18 — "Cardiovascular Syphilis — A Roentgenologic Study", by Dr. Samuel Brown and Dr. Archie Fine, with discussion by Dr. Julien Benjamin and Dr. R. N. Speckman; "The Roentgen Ray Treatment of Infectious Processes", by Dr. Harold G. Reineke, with discussion by Dr. Daniel J. Kindel.

January 25—"A Case of True Hermaphroditism",—(Case Report), by Dr. Parke G. Smith, Dr. James R. Mack and Dr. Maynard Murray; "Facts and Fallacies in Present Day Gynecologic Endocrinology", by Dr. Isfred Hofbauer, with discussion by Albert P. Matthews, Ph.D., Dr. James M. Pierce and Charles K. Weichert, Ph.D.; "A Preliminary Report on the 'Phasing' of Hypodermic Hormones in the Treatment of Functional Gynecological Conditions", by Dr. George Lyford. —Bulletin.

HIGHLAND

Officers of the Highland County Medical Society for 1938 are: Dr. J. C. Larkin, Hillsboro, president and legislative committeeman; Dr. J. D. McBride, Hillsboro, vice-president; Dr. W. B. Roads, Hillsboro, secretary-treasurer, and Dr. H. W. Chaney, Surgartree Ridge, delegate.—W. B. Roads, M.D., secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CLARK

Guest speaker at the annual banquet of the Clark County Medical Society, January 12, at the Springfield County Club, was Dr. Wm. R. Cubbins, Chicago, Ill., professor of surgery, Loyola University School of Medicine. His subject was "Disorder of Hip Joints". Eighty-one physicians attended the dinner, including the following out-of-town guests: Dr. H. L. Brumbaugh, Dr. J. H. Beaton, Dr. J. M. Shaffer, Dr. Robert C. Austin, Dr. W. Richard Hochwalt, Dr. Jerome Hartman and Dr. J. A. Judy, Dayton; Dr. J. D. Wilson, Columbus; Dr. R. V. Anderson, North Lewisburg; Dr. N. M. Rhodes, Dr. F. E. Lowry, Dr. M. C. Houston, Dr. E. D. Buhrer and Dr. V. G. Wolfe, Urbana; Dr. Ben R. McClellan, Dr. Reyburn McClellan and Dr. T. F. Myler, Xenia; Dr. John A. Caldwell, Dr. Robert Carothers and Dr. Wm. T. Foley, Cincinnati; and Dr. R. B. Pratt and Dr. F. Blair Webster, Bellefontaine. The banquet committee consisted of Dr. James H. Riley, Dr. G. C. Ullery and Dr. J. H. Rinehart.—D. W. Hogue, M.D., Councilor.

DARKE

Officers of the Darke County Medical Society for 1938 are: Dr. C. J. Mills, Greenville, president; Dr. P. G. Lenhert, Arcanum, vice-president; Dr. W. D. Bishop, Greenville, secretary-treasurer; Dr. Donald G. Carlson, Ansonia, legislative committeeman; Dr. C. I. Stephen, Ansonia, delegate; and Dr. J. W. Van Lue, Gettysburg, alternate.—W. D. Bishop, M.D., secretary.

GREENE

An excellent program was presented at a meeting of the Greene County Medical Society, Thursday, January 6, at the Court House, Xenia. Dr. George T. Harding, Columbus, discussed "Mental Disorders in General Practice", and Dr. Harrison S. Evans, Columbus, spoke on "Unrecognized Strokes". Dr. P. B. Wingfield, Yellow Springs, told of the possibility of obtaining a "Schwartzmann Phenonenia", in giving diphtheria toxoid after the Schick test.

The society adopted a resolution expressing

sympathy to the family of Dr. A. C. Messenger, who died recently, after practicing medicine for 53 years.—Donald F. Kyle, M.D., secretary.

MIAMI-SHELBY

Members of the Miami County Medical Society were hosts to their colleagues of Shelby County at the annual joint meeting of the societies, Friday noon, January 7, at the Favorite Hotel, Piqua. The speaker was Dr. Daniel J. Kindel, Cincinnati, who gave a very interesting illustrated talk on "Early Diagnosis and Treatment of Syphilis". The meeting was attended by 35 members from Miami County and 11 from Shelby County, one of the finest turnouts in recent years.—G. A. Woodhouse, M.D., secretary.

Editor's Note:—An error was made in the list of officers of the Miami County Medical Society published in the January issue of *The Journal*. Dr. G. A. Woodhouse is delegate of the society instead of Dr. I. C. Kiser.

MONTGOMERY

At a meeting of the Montgomery Medical Society, January 7, a symposium on "Advances in Surgery During the Year 1937", was presented. Dr. W. A. Reiling spoke on "General Surgery", Dr. A. W. Carley, discussant; Dr. R. E. Tyvand, "Urological Surgery", Dr. C. A. Coleman, discussant; and Dr. J. L. Brumbaugh, "Orthopedic Surgery", Dr. J. Hartman, discussant.—Mildred E. Jeffrey, executive secretary.

PREBLE

Dr. Gerald C. Grout, Dayton, lectured on "Allergies", at a meeting of the Preble County Medical Society, Wednesday noon, December 22, at the Court House, Eaton. The society elected the following officers for 1938: Dr. C. E. Newbold, Eaton, president, and Dr. Joseph R. Williams, Eaton, secretary.—E. P. Trittschuh, M.D., retiring secretary.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

ALLEN

Officers of the Academy of Medicine of Lima and Allen County for 1938 are: Dr. Ezra Burnett, Delphos, president; Dr. Ira D. Baxter, Lima, vice-president; Dr. F. G. Maurer, Lima, secretary; Dr. T. T. Sidener, Lima, treasurer; Dr. J. R. Tillotson, Lima, delegate; and Dr. E. H. Hedges, Lima, alternate.—F. G. Maurer, M.D., secretary.

HANCOCK

Approximately 50 Allen and Hancock County physicians attended a meeting at the new Community Hospital, Bluffton, Thursday, January 13. Dr. B. F. Mowry, Findlay, president of the Hancock County Medical Society, presided. Dr. John B. Alcorn, Columbus, President of the Ohio State Medical Association, spoke on "Socialized Medicine". His address was discussed by Dr. H. M. Platter, Columbus, secretary of the State Medical Board.

LOGAN

Officers of the Logan County Medical Society for 1938 are: Dr. F. Blair Webster, Bellefontaine, president; Dr. C. H. Thompson, West Mansfield, vice-president; Dr. C. L. Barrett, Bellefontaine, secretary-treasurer; Dr. J. P. Harbert, Bellefontaine, legislative committeeman; Dr. C. K. Startzman, Bellefontaine, Dr. R. A. Firmin, Zanesfield, Dr. B. B. Blank, DeGraff, Dr. Lee Traul, Middleburg, and Dr. A. J. McCracken, Bellefontaine, members of the Public Relations Committee; Dr. M. L. Pratt, Dr. R. H. Butler and Dr. F. R. Makemson, members of Medical Economics and Program Committee; Dr. Startzman, delegate, and Dr. Pratt, alternate.—F. Blair Webster, M.D., retiring secretary.

MARION

At a meeting of the Marion Academy of Medicine, Tuesday, December 7, the following officers were elected for the ensuing year: Dr. C. L. Baker, Kirkpatrick, president; Dr. Floyd Yeager, Marion, vice-president; Dr. Robert G. McMurray, Marion, secretary; Dr. Milton Axthelm, Caledona, treasurer; Dr. Thomas Sutherland, Marion, legislative committeeman; Public Relations Committee—Dr. Frank L. Thomas, Dr. A. A. Starner, Dr. Warren Sawyer, Dr. C. J. Altmaier, all of Marion; Medical Economics Committee—Dr. John Bull and Dr. R. T. Morgan, Marion; Dr. H. K. Mouser, Marion, delegate, and Dr. B. D. Osborn, Waldo, alternate.

Two interesting papers were presented at a meeting of the Academy at Marion City Hospital, January 4. Dr. Frank W. Harrah, Columbus, spoke on "Neoplasm of the Kidney and Ureter", and Dr. James H. Warren, Columbus, discussed "Progress in Medicine in 1937".—R. G. McMurray, M.D., secretary.

SENECA

A symposium on fractures was presented at a meeting of the Seneca County Medical Society, Thursday evening, January 13, at the Shawhan Hotel, Tiffin. Dr. Paul J. Leahy discussed "Fractures of Upper Extremity", and Dr. Charles F. Daniel, "Fractures of Lower Extremity". The discussants were Dr. Ralph E. Hershberger and Dr. Roswell F. Machamer.

Officers of the society for 1938 are: Dr. John M. Leahy, Tiffin, president; Dr. Edmund F. Ley, secretary-treasurer; Dr. R. F. Machamer, legislative committeeman; Dr. G. W. Williard, public relations committeeman; Dr. R. R. Hendershott,

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delegate, and Dr. E. H. Porter, alternate; all of Tiffin.—Edmund F. Ley, M.D., secretary.

VAN WERT

The Van Wert County Medical Society has elected the following officers for 1938: Dr. L. N. Irvin, Ohio City, president; Dr. F. W. Dannecker, Van Wert, vice-president; Dr. C. A. Morgan, Van Wert, secretary-treasurer; Dr. Charles R. Keyser, Van Wert, legislative committeeman; Dr. W. J. Reuter, Ohio City, medical economics committeeman; Dr. J. R. Jarvis, Van Wert, delegate, and Dr. F. C. Duckwall, Van Wert, alternate.—C. A. Morgan, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

DEFIANCE

At a meeting of the Defiance County Medical Society, December 10, at Defiance City Hospital, the society endorsed the answer of the Ohio State Medical Association to the "Committee of Physicians". A committee was appointed to study the proposed plan for medical care of children under the Aid to Dependent Children program. The following physicians were elected honorary members for 1938: Dr. J. Reynolds and Dr. R. B. Cameron, Defiance, and Dr. H. W. Cook, Hicksville.

Officers of the society for 1938 are: Dr. D. J. Slosser, Defiance, president; Dr. G. E. Winn, Defiance, vice-president; Dr. E. P. Mitchell, Defiance, secretary-treasurer; Dr. John U. Fauster, Jr., Defiance, legislative and public relations committeeman; Dr. George DeMuth, Sherwood, chairman, and Dr. E. C. Wurst, Defiance, member, program committee; Dr. Slosser, delegate, and Dr. John D. Cameron, Defiance, alternate.—E. P. Mitchell, M.D., secretary.

LUCAS

The following programs were presented by the Toledo Academy of Medicine during January:

January 7—Annual Dinner and Annual Meeting, with reports and election of officers.

January 14—Section of Pathology, Experimental Medicine and Bacteriology, "Hyperinsulinism with Hypoglycemia", by Dr. L. A. Levison and Dr. T. L. Ramsey; discussants, Dr. J. L. Stifel and Dr. H. F. Howe.

January 21—Medical Section—"Progress in Internal Medicine during 1937", by Dr. C. S. Mundy.

January 28—Surgical Section.—"Surgery of the Gallbladder", by Dr. Waltman Walter, Rochester, Minn., associate professor of surgery, University of Minnesota Graduate School of Medicine.—Bulletin.

PAULDING

At a meeting of the Paulding County Medical Society, December 22, at Paulding, the society voted its thanks and appreciation to the Ohio State Medical Association for presenting the Regional Postgraduate Lectures in Northwestern Ohio. The society also voted its disapproval of the proposals of the "Committee of Physicians", and urged that "all forms of state medicine be abolished".

The following officers were elected for 1938: Dr. K. C. Evans, Payne, president; Dr. Ernest Kohn, Grover Hill, vice-president; Dr. F. A. McCammon, secretary and treasurer; Dr. R. H. Mouser, Paulding, legislative committeeman; Dr. T. P. Fast, Grover Hill, and Dr. R. H. Mouser, Paulding, medical economics committeemen; Dr. L. R. Fast, Paulding, delegate, and Dr. Mouser, alternate.—F. A. McCammon, M.D., secretary.

PUTNAM

Dr. H. C. Weisenbarger, Lima, was the speaker at a meeting of the Putnam County Medical Society, Tuesday evening, December 7, at the Hotel Dumont, Ottawa.—News clipping.

Officers of the society for 1938 are: Dr. O. J. Fatum, Ottoville, president; Dr. B. P. Davis, Fort Jennings, secretary-treasurer; Dr. R. L. Tecklenberg, Glandorf, Correspondent for *The Journal;* Dr C. O. Beardsley, Ottawa, Dr. W. B. Light, Ottawa, and Dr. B. P. Davis, Fort Jennings, legislative committeemen; Dr. W. D. Hickey, Leipsic, delegate, and Dr. B. Watterson, Continental, alternate.—R. L. Tecklenberg, M.D., retiring secretary.

SANDUSKY

Probate Judge Robert J. Gabel discussed the "Aid for Dependent Children Program", at a meeting of the Sandusky County Medical Society, Thursday night, December 16, at the Old Elm Tea Room, Fremont.—News clipping.

The following officers were elected for 1938: Dr. C. J. Wolf, Fremont, president; Dr. M. M. Riddell, Fremont, vice-president; Dr. T. R. Cunningham, Fremont, secretary-treasurer; Dr. C. J. Wehr, Bellevue, legislative committeeman; Dr. C. I. Kuntz, Fremont, public relations committeeman; Dr. E. W. Baker, Fremont, medical economics committeeman; Dr. Kuntz, delegate, and Dr. J. C. Boyce, Fremont, alternate.—M. M. Riddell, M.D., retiring secretary.

WILLIAMS

Officers of the Williams County Medical Society for 1938 are: Dr. W. L. Hogue, Montpelier, president; Dr. Wm. L. Hann, West Unity, vice-president; Dr. J. Fred Smith, Montpelier, secretary-treasurer; Dr. F. E. Solier, Bryan, legislative committeeman; Dr. H. W. Wertz, Montpelier,

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delegate, and Dr. H. R. Mayberry, Bryan, alternate.—J. Fred Smith, M.D., secretary.

Fifth District

(COUNCILOR: H. V. PARYZEK, M.D., CLEVELAND)

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during January:

January 7—Clinical and Pathological Section. "Functional End Results of Thoracoplasty for Pulmonary Tuberculosis with Demonstration of Patients", by Dr. S. E. Wolpaw; "A Case of Lymphogranulome Venereum with Extension to Hip Joint", by Dr. L. L. Terry and Dr. W. F. Schwartz; "Aneurysm of the Splenic Artery", by Dr. J. V. Seids; "Significance of Tests for Peripheral Vascular Disease", by Dr. L. N. Atlas; "Reactivation as a Factor in the Development of Pulmonary Tuberculosis", by Dr. H. S. Reichle; "Roentgen Finds in Angiosarcoma of Bone", by Dr. H. Hauser; "Gastroscopy in Diseases of the Stomach", by Dr. I. H. Einsel.

January 12—Practice of Medicine Section. "Cardiovascular Disease at City Hospital: Clinical and Pathological Observations on 600 Consecutive Autopsy Cases", by Dr. Curtis F. Carvin, with discussion by Dr. R. W. Scott and Dr. Howard T. Karsner.

January 14—Joint Meeting of Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "Studies in Ovulation", by Dr. J. T. Smith; "The Changes of Serum Proteins During Pregnancy", by Dr. J. W. Mull; "Microscopic Reactions of the Pulmonary Artery", by A. J. Gilbert, A.B.; "The Bismuth Distribution in the Organs of Patients and of Experimental Animals", by Dr. T. Sollman, Dr. H. N. Cole, and Katharine I. Henderson, A.B.; "The Influence of the Ca/P Ratio of the Diet on the Ca/P Ratio of the Blood Serum During the Development and the Cure of Low Phosphorus Rickets", by Dr. H. H. Gerstenberger, Donalda N. Smith, B.S., Edna Chapman, M.A., Catharine Rose, M.S., and F. Beal.

January 17—Pediatric Section. "The Comparative Incidence of Umbilical Hernia in Colored and in White Infants", by Dr. A. G. Evans; "Pili Annulati; a Hereditary(?) Anomaly of the Hair", by Dr. J. Hart Davis, M.D.; "Acute Contagious Digestive Disturbances", by Dr. C. W. Wyckoff.—Bulletin.

ERIE

Officers of the Erie County Medical Society for 1938 are: Dr. Henry L. Sowash, Sandusky, president; Dr. Emil J. Meckstroth, Sandusky, vice-president; Dr. Ross M. Knoble, Sandusky, secretary-treasurer; Dr. Harold Waltz, chairman,

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C. W. Martin, M. D., New York State Journal of Medicine, September 1, 1932.

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LORAIN

Dr. Norris W. Gillette, Toledo, spoke on "Goiter", at a meeting of the Lorain County Medical Society, Tuesday evening, January 11, at the Hotel Antlers, Lorain.—H. L. Trufant, M.D., secretary.

MEDINA

Medina County Medical Society has elected the following officers for 1938: Dr. James K. Durling, Wadsworth, president; Dr. John L. Jones, Medina, vice-president; Dr. H. T. Pease, Wadsworth, secretary-treasurer; Dr. R. L. Mansell, Medina, legislative committeeman; Dr. Morris Wilderom, Medina, delegate, and Dr. Henry G. Lehrer, alternate.—H. T. Pease, M.D., secretary.

TRUMBULL

"Fractures of the Femur", was the topic discussed by Dr. Russell H. Birge and Dr. Theodore A. Willis, Cleveland, at a meeting of the Trumbull County Medical Society, December 16, at Warren.—News clipping.

Officers of the society for 1938 are: Dr. A. W. Beale, president; Dr. P. N. Mutschman, vice-president; Dr. A. H. Seiple, secretary; Dr. R. D. Herlinger, delegate, and Dr. J. D. Knox, alternate, all of Warren.—A. H. Seiple, M.D., secretary.

Sixth District

(COUNCILOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

ASHLAND

Dr. R. S. Friedley, Akron, spoke on "Infant Feeding", at a meeting of the Ashland County Medical Society, at the Hotel Otter, Ashland, Friday, January 14.—M. D. Shilling, M.D.

MAHONING

Officers of the Mahoning County Medical Society for 1938 are: Dr. Claude B. Norris, president; Dr. Wm. M. Skipp, president-elect; Dr. R. B. Poling, secretary; Dr. Elmer H. Nagel, treasurer; Dr. O. J. Walker, chairman of legislative committee; Dr. Walter K. Stewart, chairman, public relations committee; Dr. Earl H. Young, chairman, and Dr. E. F. Piercy, co-chairman, sub-committee on economics; Dr. Stewart, Dr. Walker and Dr. Gordon G. Nelson, delegates; Dr. Dean Nesbit, Dr. Edward J. Reilly and Dr. Ivan C. Smith, alternate. All of the above physicians are from Youngstown, except Dr.

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In the absence of typical dermatitis, available means for the diagnosis of deficiencies of the anti-pellagric factor are not entirely satisfactory. The practitioner must rely upon a variable group of less specific symptoms such as glossitis, diarrhea, digestive disturbances, and nervous and mental disorders. However, consideration of these symptoms along with an evaluation of the diet upon which the subject had been maintained, may permit the conclusion that suboptimal intake of the P-P factor should be suspected.

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1. 1937. J. Am. Med. Assn. 108, 15.
1935. Ibid. 104, 1377.

2. 1934. U. S. Pub. Health Rpts. 49, 755.

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PORTAGE

A good talk on "Cancer of the Breast" was made by Dr. J. Robert Andrews, University Hospitals, Cleveland, at a meeting of the Portage County Medical Society, Thursday, January 6, at the home of his father, Dr. W. B. Andrews, Kent, who has been an enthusiastic and loyal member of the society for 35 years.—E. J. Widdecombe, M.D., secretary.

RICHLAND

Richland County Medical Society has elected the following officers for 1938: Dr. Hugh Winbigler, president; Dr. Carl R. Damron, vice-president; Dr. W. W. Peirce, secretary-treasurer; Dr. C. R. Keller, legislative committeeman; Dr. John S. Hattery, delegate, and Dr. D. C. Lavender, alternate, all of Mansfield.—F. J. Heringhaus, M.D., retiring secretary.

STARK

Dr. Charles A. LaMont, Canton, spoke on "Arteriosclerosis in Diabetes", at a meeting of the Stark County Medical Society, Tuesday evening, January 11, at St. Paul's Episcopal Church, Canton.—Clair B. King, M.D., secretary.

SUMMIT

Officers of the Summit County Medical Society for 1938 are: Dr. James G. Lemmon, president; Dr. Donald B. Lowe, president-elect; Dr. A. S. McCormick, secretary-treasurer; Dr. J. R. Shoemaker, chairman, legislative committee; Dr. A. P. Ormond, chairman, medical relations committee; Dr. R. S. Friedley, chairman, medical economics committee; Dr. C. R. Steinke, Dr. W. A. Hoyt, Dr. D. C. Brennan and Dr. Lowe, delegates; Dr. F. C. Potter, Dr. F. B. Roberts, Dr. H. H. Musser, and Dr. E. A. Freeman,alternates.

At a meeting of the society at the Mayflower Hotel, Akron, Tuesday evening January 20, following the installation of officers a symposium, "The Progress of 1937," was presented. Dr. H. E. Woodbury discussed "Medicine"; Dr. L. L. Bottsford, "Obstetrics and Gynecology"; Dr. V. C. Malloy, "Eye, Ear, Nose and Throat"; Dr. A. E. Davis, "Surgery", and Dr. W. J. Pittenger, "Pediatrics".—A. S. McCormick, M.D., secretary.

WAYNE

Dr. Edward E. Woldman addressed a meeting of the Wayne County Medical Society, Wednesday evening, December 29, at Wooster, on the subject, "A Continuous Intragastric Drip of Colloidal Aluminum Hydroxide in the Treatment of Peptic Ulcer and Hematemesis".

The society elected the following Wooster physicians as officers for 1938: Dr. L. A. Adair, president; Dr. W. F. Mitchell, vice-president; Dr. R. C. Paul, secretary-treasurer; Dr. O. P.

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It Can Happen Here



Example of severe rickets in a sunny clime. Courtesy of E. H. Christopherson, M.D., San Diego, and of "California and Western Medicine."

LEST WE FORGET—we who are of the vitamin D era—severe rickets is not yet eradicated, and moderate and mild rickets are still prevalent. Here is a white child, supposedly well fed, if judged by weight alone, a farm child apparently living out of doors a good deal. This boy was reared in a state having a latitude between 37° and 42°, where the average amount of fall and winter sunshine is *equal to that in the major portion of the United States*. And yet such stigmata of rickets as *genu varum* and the quadratic head are plain evidence that rickets does occur under these conditions.

How much more likely, then, that rickets will develop among city-bred children who live under a smokepall for a large part of each year. True, vitamin D is more or less routinely prescribed nowadays for infants. But is the antiricketic routinely administered in the home? Does the child refuse it? Is it given in some unstandardized form, purchased from a false sense of economy because the physician did not specify the kind?

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Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

CARROLL

Officers of the Carroll County Medical Society for 1938 are: Dr. W. G. Lyle, Minerva, president; Dr. J. D. Stires, Malvern, vice-president; Dr. Carl A. Lincke, Carrollton, secretary-treasurer; Dr. W. G. Lyle, Minerva, delegate, and Dr. P. S. Whiteleather, Minerva, alternate.—Carl A. Lincke, M.D., secretary.

COLUMBIANA

Dr. Walter J. Urben, Massillon, spoke on "The Diagnosis and Treatment of the Commoner Psychoses", at a meeting of the Columbiana County Medical Society, Tuesday night, January 11, at the American Legion Home, Lisbon.—News clipping.

JEFFERSON

Jefferson County Medical Society has elected the following officers for 1938: Dr. F. M. Slaughter, president; Dr. John F. Gallagher, vice-president; Dr. John P. Smarrella, secretary-treasurer, and Dr. E. J. C. Sander, legislative committeeman.—John P. Smarrella, M.D., secretary.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

MORGAN

Dr. W. D. Coffman, Zanesville, was the guest speaker at a meeting of the Morgan County Medical Society, Tuesday evening, December 21, at the Kennebec Hotel, McConnelsville.—News clipping.

Officers of the society for 1938 are: Dr. A. A. Tombaugh, president; Dr. E. G. Rex, secretary-treasurer; Dr. C. E. Northrup, legislative committeeman; Dr. C. Edgar Northrup, delegate, and Dr. Rex, alternate, all of McConnelsville.—E. G. Rex, M.D., secretary.

MUSKINGUM

At a meeting of the Muskingum County Academy of Medicine, Wednesday evening, January 5, at the University Club, Zanesville, Dr. Arthur W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, discussed the possibility of presenting a refresher course in obstetrics in Zanesville, under the auspices of the Department. Miss Joanne Ortelle, R.N., of

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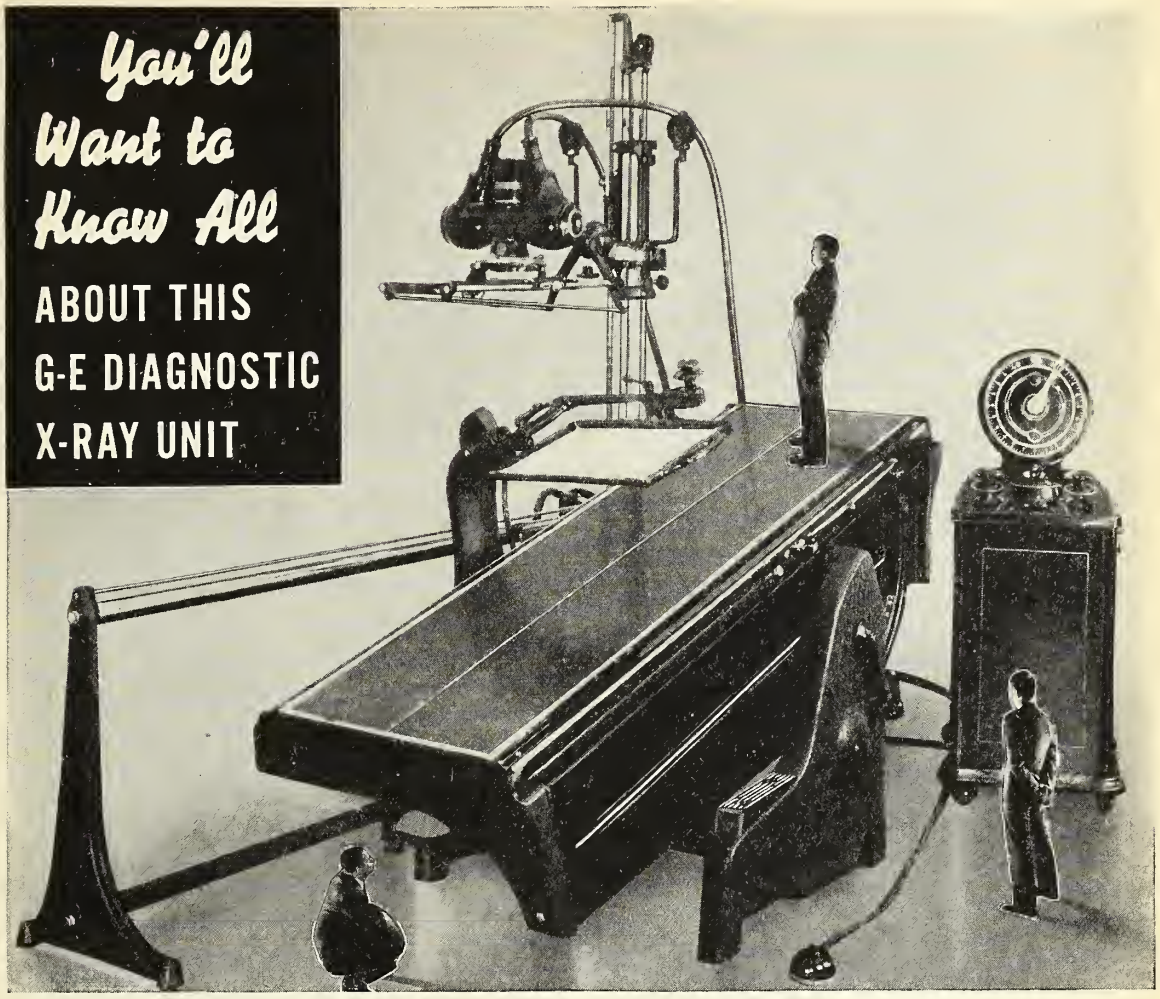
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the Bureau of Aid to Dependent Children, State Division of Public Assistance, explained the plan proposed for medical care of children receiving A.D.C. aid.

The following Zanesville physicians are officers of the society for 1938: Dr. Chas. J. Roach, president; Dr. Cheney Prouty, vice-president; Dr. Beatrice T. Hagen, secretary-treasurer; Dr. M. A. Loebell, delegate, and Dr. C. F. Sisk, alternate.—Beatrice T. Hagen, M.D., secretary.

PERRY

At a meeting of the society at the Park Hotel, New Lexington, Thursday noon, January 20, Dr. Franklin C. Hugenberger, Columbus, spoke on "Some Obstetrical Problems".

Officers of the Perry County Medical Society for 1938 are: Dr. Joseph H. Clouse, Somerset, president; Dr. James Miller, Corning, vice-president; Dr. F. J. Crosbie, New Lexington, secretary-treasurer; Dr. C. B. McDougal, New Lexington, legislative committeeman; Dr. R. W. Miller, Hemlock, public relations committeeman; Dr. W. D. Porterfield, Junction City, medical economics committeeman; Dr. H. F. Minshull, New Lexington, delegate, and Dr. Miller, alternate.—F. J. Crosbie, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

GALLIA

Three reels of motion pictures on "The Science and Art of Obstetrics", prepared by Dr. Joseph B. DeLee, chief of staff, Lying-In Hospital, Chicago, were presented at a meeting of the Gallia County Medical Society, at the Holzer Hospital, Gallipolis, Thursday evening, January 6.—Milo Wilson, M.D., secretary.

LAWRENCE

At a meeting of the Lawrence County Medical Society, December 31, at Ironton, the following officers were elected for 1938: Dr. C. A. Casey, president; Dr. V. V. Smith, vice-president; Dr. Wm. A. French, secretary-treasurer; Dr. Wm. F. Marting and Dr. O. H. Henninger, legislative committeemen; Dr. Ralph F. Massie, delegate, and Dr. George G. Hunter, alternate, all of Ironton.—Wm. A. French, M.D., secretary.

MEIGS

Officers of the Meigs County Medical Society for 1938 are: Dr. E. F. Maag, Pomeroy, president; Dr. P. A. Jividen, Rutland, vice-president; Dr. Robert R. Boice, Pomeroy, secretary-treasurer; Dr. Byron Bing, Pomeroy, legislative committeeman; Dr. Raymond E. Boice, Middleport, public relations committeeman; Dr. F. M. Cluff, Middleport, medical economics committeeman;

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**Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245*
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Arch. Otolaryngology, Mar. 1936. Vol. 23, No. 3
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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Dr. Jividen, delegate, and Dr. Bing, alternate.—R. E. Boice, M.D., retiring secretary.

SCIOTO

Fifty-four physicians of Portsmouth and Scioto County attended the annual banquet of the Hempstead Academy of Medicine, Thursday evening, December 16, at the Washington Hotel, Portsmouth. Clyde D. Moore, Columbus newspaperman, was the guest speaker. Short talks were made by Dr. W. D. Micklethwait, the retiring president, and Dr. W. E. Scaggs, the new president. Dr. W. A. Quinn was the toastmaster. —Clipping.

Dr. Virgil Simpson, professor of clinical medicine, University of Louisville College of Medicine, gave an illustrated lecture on "Pituitary Gland Dyscrasias—Diagnosis and Treatment", at a meeting of the Academy, January 10, at the Portsmouth General Hospital.—Wm. E. Scaggs, M.D., president.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

DELAWARE

Officers of the Delaware County Medical Society for 1938 are: Dr. Emerson V. Arnold, Delaware, president; Dr. G. E. Robinson, Ostrander, vice-president; Dr. M. S. Cherington, Delaware, secretary-treasurer; Dr. A. R. Callander, Delaware, legislative committeeman; Dr. F. M. Stratton, Delaware, chairman, public relations committee; Dr. D. S. James, Delaware, chairman, medical economics committee; Dr. James G. Parker, Delaware, delegate, and Dr. W. E. Borden, Delaware, alternate.—M. S. Cherington, M.D., secretary.

FRANKLIN

Officers of the Columbus Academy of Medicine for 1938 are: Dr. Wm. B. Morrison, president; Dr. George I. Nelson, president-elect; Dr. Paul W. Palmer, secretary-treasurer; Dr. I. B. Harris, Dr. J. H. J. Upham, Dr. E. J. Emerick, Dr. L. L. Bigelow and Dr. John M. Thomas, delegates; Dr. George T. Harding, Dr. J. M. Dunn, Dr. H. E. LeFever, Dr. John H. Mitchell and Dr. John E. Brown, Jr., alternates.—S. R. Mauck, executive secretary.

The Academy, which now meets in the auditorium of the Columbus Gallery of Fine Arts, presented the following programs during January:

January 3—Report of Medical Progress Committee. "Medicine", by Dr. J. H. Warren; "Ophthalmology", by Dr. A. D. Frost. Reports by Chairmen of Standing Committees; Membership, Dr. L. W. Rohr; Legislative, Dr. J. M. Thomas; Library, Dr. G. M. Thomas; Necrology, Dr. R. B. Taylor.

January 17—Report of Medical Progress Committee: "Surgery", by Dr. H. E. Boucher; "Obstetrics", by Dr. F. C. Hugenberger. Reports by Chairmen of Standing Committees: Civic Affairs, by Dr. Andre Crotti; Public Health, by Dr. C. H. Benson; Program Committee, by Dr. R. A. Ramsey.

January 24—Section of General Medicine. "Sterility in Women", by Dr. Roy Krigbaum; "The Importance of Mental Guidance in Childhood". New officers of the section are Dr. George W. Keil, chairman; Dr. John Rauschkolb, secretary, and Dr. J. B. Chronik, Dr. C. C. Ross and Dr. John Thomas, members of the Executive Commttee.—Bulletin.

KNOX

The following Mt. Vernon physicians are officers of the Knox County Medical Society for 1938: Dr. Robert L. Eastman, president; Dr. Julius Shamansky, vice-president; Dr. John C. Drake, secretary-treasurer; Dr. James F. Lee, legislative committeeman; Dr. F. C. Anderson, delegate, and Dr. Shamansky, alternate.—Robert L. Eastman, M.D., retiring secretary.

MADISON

Officers of the Madison County Medical Society for 1938 are: Dr. R. S. Postle, London, president; Dr. H. P. Sparling, London, vice-president; Dr. W. A. Holman, London, secretary-treasurer; Dr. F. E. Rosnagle, London, legislative committeeman; Dr. R. H. Trimble, Mt. Sterling, public relations committeeman; Dr. R. W. E. Irwin, Mt. Sterling, medical economics committeeman; Dr. Holman, delegate, and Dr. Postle, alternate.—W. A. Holman, M.D., secretary.

ROSS

Dr. C. C. Sherburne, Columbus, spoke on "Pneumonia Therapy", and Dr. H. B. Davidson,

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Columbus, discussed "Pathology of Pneumonia", at a meeting of the Ross County Medical Society, Thursday evening, January 6, at Chillicothe.

H.O.L.C. Medical Service Plan Rapped By Mahoning County Medical Society

At a meeting of the Mahoning County Medical Society, December 21, at Youngstown, the following resolution was unanimously adopted, and copies ordered sent to government officials, members of Congress and officers of prominent organizations:

Whereas, An organization known as Group Health Association, Incorporated, is chartered in the District of Columbia to provide medical, surgical and hospital service to its members and their dependents on a monthly prepayment plan;

And Whereas, Membership in Group Health Association, Incorporated, is available to every employee of every branch of the United States government other than the officers and enlisted men of the Army and Navy;

And Whereas, The Group Health Association, Incorporated, has been organized, sponsored and financially aided by the Federal Home Loan Bank, an affiliate of the Home Owners Loan Corporation, a fiscal agent of the Federal Government;

And Whereas, Group Health Association, Incorporated, incorporated as a benevolent, charitable, educational, literary, musical, scientific, religious and missionary organization, is in fact practicing unlicensed and unregulated health insurance and illegally engaging in the corporate practice of medicine;

And Whereas, Group Health Association, Incorporated, is in fact a thinly disguised attempt on the part of the Federal Government to introduce a form of socialized medicine without proper legislative authority to do so;

Therefore Be It Resolved: That it is the concensus of the Mahoning County Medical Society that every effort should be made by the executive and legislative branches of the Government to end the practice of unlicensed and unregulated health insurance and the illegal corporate practice of medicine by the "Group Health Association, Incorporated", among government employees, which in fact has meant the introduction of a form of socialized medicine by an agent of the Federal Government without the proper legislative authority and is resulting in the destruction of the private practice of medicine in the District of Columbia.

Cleveland—On January 18, Dr. Myron Metzenbaum of Cleveland participated in the Buffalo Oto-laryngological Society meeting where he presented a program on "Dislocations of the Septal Cartilage". At the Buffalo Childrens Hospital during the afternoon he gave a diagnostic and operative clinic on the "Reduction of Dislocations of the Septal Cartilage". In the evening he presented a paper with lantern slides and models on "The Effects of the Normal Cartilaginous Septum Upon the Anatomical Development of the Nose, Jaws, Sinuses and Teeth".

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NEWS NOTES

Akron—Dr. C. L. Hyde, superintendent of the Edwin Shaw Sanatorium, spoke on "Fighting Tuberculosis in Summit County" at a recent meeting of the Lions Club.

Alliance—Officers of City Hospital staff for 1938 are: Dr. B. C. Barnard, president; Dr. H. G. Scranton, vice-president; Dr. G. Otho Thompson, secretary, and Dr. Perry F. King, treasurer.

Ashtabula—The medical staff of General Hospital has selected the following officers for 1938: Dr. C. C. Campbell, president; Dr. H. A. Tagett, vice-president; Dr. T. F. O'Connor, secretary-treasurer; and Dr. A. M. Mills, Dr. Donald Forward and Dr. C. E. Case, members of the executive board.

Bellevue—Dr. C. R. Pontius, Fremont, spoke on "Unusual Incidents in the Life of Abraham Lincoln" at a recent meeting of the Kiwanis Club.

Campbell—Dr. E. J. Reilly is the new city health commissioner.

Cambridge—Dr. B. A. Souders has been elected president and Dr. C. C. Headley, secretary of the Swan Hospital staff.

Celina—Dr. Harry S. Noble, St. Marys, spoke on "New Things in Medicine" at a recent meeting of the Kiwanis Club.

Cincinnati—Dr. A. C. Bachmeyer, director of the University of Chicago Clinics, and formerly dean of the University of Cincinnati College of Medicine, was an honor guest at the recent twentieth annual meeting of Public Health Federation.

Circleville—Dr. Edwin L. Montgomery spoke on "Preventive Medicine" at a recent meeting of the Business and Professional Women's Club.

Cleveland—During the recent sesquicentennial of Franklin and Marshall College, Lancaster, Pa., Dr. Claude S. Beck, Cleveland, was awarded the degree of doctor of science.

Columbus—Officers of the staff of White Cross Hospital for 1938 are: Dr. Harry E. LeFever, president; Dr. Paul R. Bauman, vice-president, and Dr. B. L. Smith, secretary-treasurer.

Dayton—Officers of the medical staff of Good Samaritan Hospital for 1938 are: Dr. M. R. Haley, president; Dr. L. J. Degar, vice-president; Dr. F. C. Payne, secretary, and Dr. A. W. Carley and Dr. R. L. Johnson, executive committee members.

East Liverpool—New officers of the City Hospital staff are: Dr. Roy C. Costello, president; Dr. C. J. Maxwell, vice-president; Dr. J. A. Fraser, secretary-treasurer.

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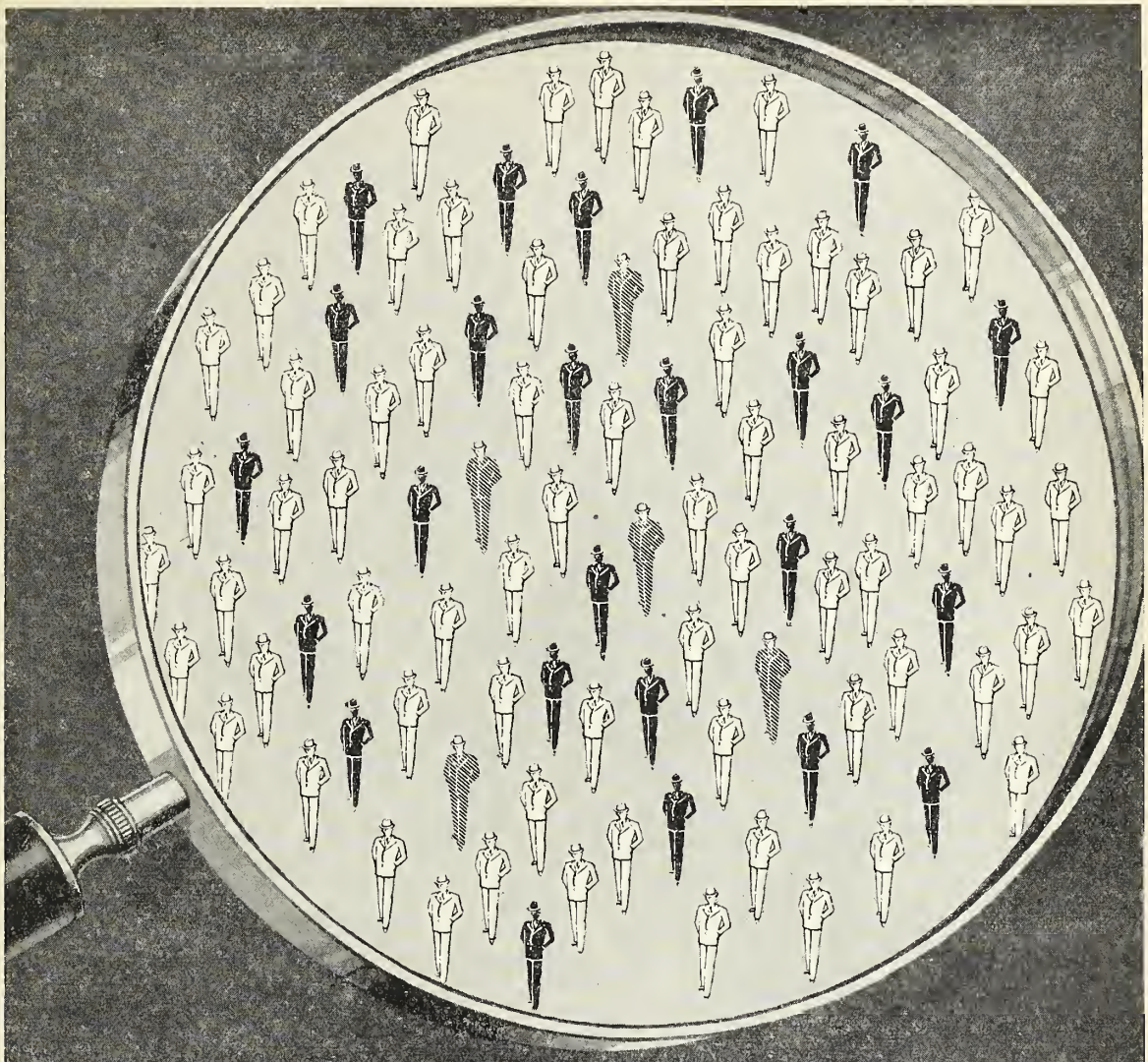
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Edon—Dr. and Mrs. Albert Hathaway celebrated their fiftieth wedding anniversary recently.

Elyria—Dr. George D. Nicholas was recently elected president of Memorial Hospital staff. Other officers are: Dr. A. W. Robishaw, vice-president, and Dr. R. H. Evans, secretary.

Findlay—Medical progress was reviewed by Dr. O. P. Klotz at a recent meeting of the Up-to-Date Club.

Fremont—Officers of Memorial Hospital for 1938 are: Dr. R. A. Eyestone, chief-of-staff; Dr. L. N. Bates, Fremont, vice-president, and Dr. C. R. Wood, Port Clinton, secretary.

Galion—"Socialized Medicine" was discussed by Dr. O. R. Kackley and Dr. B. P. Mansfield at a recent meeting of the Rotary Club.

Grove City—Dr. James C. Sommer is the new president of the Franklin County Board of Education.

Ironton—Dr. H. S. Allen has been reappointed city health commissioner.

Lima—Dr. W. W. Beauchamp spoke on "Heart Disease" at a recent meeting of the Lions Club.

Lisbon—Dr. Seward Harris has been reappointed health commissioner of Columbiana County.

Mansfield—"The Anatomy and Physiology of the Human Body" was the subject presented at a recent meeting of the Community Christian Youth Forum by Dr. W. E. Wygant and Dr. D. Dalton Deeds.

Marion—Dr. Carl W. Sawyer spoke on "Social Diseases from a Doctor's Standpoint", at a recent meeting of the Rotary Club.

Middle Point—Dr. W. E. Beach was the principal speaker at the January meeting of the local chapter of the Future Farmers of America. His subject was "Health".

Middletown—Dr. J. C. Stratton has been reelected president of the local board of education.

New Philadelphia—Dr. Charles J. Miller spoke on "X-Ray Therapy" at a recent district meeting of the Ohio State Nurses' Association.

Norwood—Dr. Carl A. Wilzbach, Cincinnati, discussed the campaign for the control of syphilis at a recent meeting of the Exchange Club.

Portsmouth—Dr. O. D. Tatje is starting his 19th consecutive year as city health commissioner.

Tiffin—Dr. E. H. Porter, Tiffin, recently told members of the Rotary Club of his trip to Russia last summer.

Wellston—Dr. John L. Frazer is the new president of the Lions Club for the ensuing year.

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The Ohio State Medical Journal

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CARDIOVASCULAR SYPHILIS

By FRANK C. CLIFFORD, M.D., and ARTHUR P. JAMES, M.D., TOLEDO, OHIO

CARDIOVASCULAR syphilis should be a preventable disease. Since its initial lesion is the initial lesion of syphilis, prompt, intelligent, persistent and scientific treatment instituted upon positive recognition of the chancre would eradicate the scourge of cardiovascular syphilis. Recent clinical investigations and the experience of mature clinicians support this statement. To avert the onset of vascular syphilis is far more important than to acquire an unerring ability to recognize its devastatingly destructive end results. The general and widespread use of the former would soon make unnecessary the latter, and no longer would cardiovascular syphilis needlessly bring suffering, invalidism and early death to so many people.

Unfortunately the acquisition of a chancre occurs most commonly when the optimistic ignorance of youth is either unable or unwilling to accept the advice of the experienced physician. The disappearance of the chancre, following antiluetic therapy, is, to the patient, sufficient proof of cure. It is difficult for him to understand that this is only a minor victory in a preliminary engagement to the major battle that will inevitably follow. Until the results of insufficient treatment are commonly known, syphilis will remain to torture the human race. Public realization of the danger would make unnecessary the present prevalent pleading of the conscientious physician insisting upon adequate treatment.

Knowledge of the ravages of the late effects of a poorly treated chancre would bring, to the medical consultant, a patient demanding a course of therapy which would assure freedom from future trouble. Widespread dissemination of this information is all that is needed to place cardiovascular syphilis on the list of preventable diseases. Intelligent and scientific publicity, though sadly neglected, is a valuable weapon for the modern physician in the fight against the plague of syphilis. Only sorrow, suffering and disappointment will follow a continuation of the old-fashioned ostrich method which having seen nothing can teach the same truthfully.

Submitted January 17, 1938, at the request of the Editor.

The Authors

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AORTITIS

Syphilis has a special affinity for vascular tissue and in particular for the male aorta[2].Coombs[3]

believes that inflammation of this artery occurs in every syphilitic infection and that some degree of aortitis will inevitably follow inadequate treatment. Cabot[4] observed in numerous necropsies on young negro soldiers in France in 1918 a small patch of syphilitic aortitis to be the rule. Maynard[5] and his associates in a careful study of 346 syphilitic patients were able to find involvement of the aorta in 145. Various reports show that 70 to 90 per cent of all patients with late syphilis have postmortem evidence of syphilis of the aorta. These facts are of vital portance because every sign or symptom of cardiovascular syphilis is essentially dependent upon aortitis. In late vascular syphilis gross evidence of heart disease is not unusual; however, it is always secondary to aortitis. Numerous investigations by competent workers have proved that extensive myocarditis is a rare complication of spirochetemia, and heart failure from such a process is practically unknown. The spirochetes in their invasion of the aorta follow the vasa vasorum, leaving behind in their pathway, inflammation and destruction. Fortunately this acute process usually subsides before irreparable damage occurs. The infection becomes quiescent and, though potentially capable of activity, remains dormant throughout the remaining years of life. Permanent anatomical evidence of its presence remains, but never causes any circulatory embarrassment. Consequently subjective symptoms never arise in these fortunate cases.

Unfortunately the acute inflammatory process of aortitis does not always subside and remain quiescent. Many years, usually 15 to 20, after the acquisition of the chancre the sudden onset of grave cardiac manifestations makes known the fact that syphilis has permanently destroyed another heart. Physical examination then reveals an aneurysm or an enormously enlarged heart, indisputable proof that for a prolonged period of time the spirochetes have been silently devastating their host, destroying without hindrance because their presence was hidden behind a smoke screen of false security—a treacherous sense of security based upon freedom from visible disease and the complete absence of any symptoms of serious trouble. This complacent assurance remains unquestioned until shattered by the acute onset of heart failure, which demonstrates the appalling mutilation that can be produced by an apparently inactive syphilis. It is almost incredible that a part of the body could undergo such a disastrous change without pain or discomfort. Nevertheless, "painless and symptomless" is characteristic of aortitis.

COMPLICATIONS

The aortic wall may be so weakened that numerous aneurysms result without causing any pain. An aneurysm may, painlessly, become so large that its presence is discovered because of the pressure it exerts on other vital structures within the chest. Intimal involvement spreading to the aortic cusps distorts the valve leaflets preventing their orderly closing. Because they are unable to separate the aorta and ventricle during diastole a free flowing aortic regurgitation results. To overcome this impediment the ventricular cavity and muscle become enlarged. The myocardial hypertrophy is usually very extensive; so much so that inadequacy of capillary circulation to nourish the increased mass of muscular tissue leads to myocardial failure. Myocardial anoxemia is common in another complication of aortitis. Frequently the intimal inflammation produces an obstruction over the mouths of the coronary arteries, and, depending upon the degree of encroachment, the coronary blood supply is decreased. Anginal pain is caused by myocardial anoxemia. Interference with coronary blood supply is a serious complication of aortitis. Treatment is of no avail either in removing the obstruction or in preventing or alleviating the anginal pain[6]. Sudden death is very common.

EARLY DIAGNOSIS IS OFTEN IMPOSSIBLE

To be of maximum therapeutic value the diagnosis of aortitis must be made early, long before aneurysm, aortic regurgitation or coronary obstruction is present. Though so essential, it is always difficult and more often impossible to discover this pathology early. It will always be a problem because the average patient consults a physician only when pain, discomfort or visible disease is present. Early, uncomplicated aortitis is painless and symptomless. Illustration of these statements is provided by four patients seen in consultation while this paper was being written. The first was a strong, healthy, white adult whose first intimation of vascular pathology was the agonizing, shocking pain initiated by the rupture of an aneurysm. A rather large saccular dilatation of the ascending aorta was observed at the autopsy table. The second was a retired, white, active male, 68 years old. Two weeks previous to examination the sudden onset of anginal pain suggested coronary disease. However, his symptoms were readily explained by a free flowing aortic regurgitation. The heart was huge, the apex visible and palpable in the anterior axillary line. Previous to the beginning of the present complaint, he had been perfectly well, according to his emphatic statement confirmed by his wife. He had daily walked several miles for exercise. The third case was a hard working man, 50 years old, who had always enjoyed unusually good health until last September when he developed an ordinary upper respiratory infection. Following this, exertion was associated with sternal distress. An increase in dullness was noted in the second right interspace. A loud blowing systolic aortic murmur was heard. The

second aortic sound was accentuated despite the fact that his blood pressure always has been within normal limits. The heart was slightly enlarged. On fluoroscopic examination a moderately large expansile aneurysm was observed. Incidentally his Wassermann was not strongly positive. The fourth individual consulted the coauthor of this paper for treatment of a positive serology discovered in a routine blood examination. Dr. James requested the cardiac investigation which revealed an aortic regurgitation with a big heart. There was no evidence of myocardial failure. His past history was negative for the rheumatic triad or any symptom of cardiac trouble. His chancre had been inadequately treated.

The salient feature of these cases is the complete absence of any discomfort even though lethal pathology had been present for a long time. Their story is trustworthy because, when pain disturbed them, all readily and quickly sought medical aid. All four presented pathological evidence of chronic rather than acute disease. Nevertheless, its presence in the first three was discovered only when pain began. The beloved teacher, Osler, did not hesitate to write that there is no disease so conductive to clinical humility as aneurysm. It is not surprising, therefore, that the simple dilatation of uncomplicated aortitis is so frequently overlooked. Even the roentgen ray often fails to demonstrate this important lesion.

PROGNOSIS

When cardiovascular syphilis is clinically recognizable it has passed the stage of cure, and its grave prognosis is ordinarily confirmed by death within two years of its discovery. The younger the patient, the nearer the date of primary infection to the appearance of the cardiovascular symptoms, the later the specific treatment was begun, the more unfavorable is the resistance of the body for the fight against the infection[7]. Once the circulation is embarrassed by aortitis, all hope of cure is useless and only alleviation of pain and prolongation of life is to be anticipated from specific therapy. Scott[8] has effectively described a common occurrence in the service of any cardiologist. "A well developed male in the prime of life, with a negative cardiac history, always able to do manual work, observes breathlessness on exertion and palpitation of the heart. These symptoms gradually increase in severity until he is no longer able to work. Edema of the lower extremities appears. At this stage he is admitted to the hospital, and one finds the cardinal signs of congestive failure, an enlarged and over-active left ventricle, with aortic insufficiency. In spite of treatment the patient may progress rapidly to death, or he may make a temporary recovery only to fail again in a few weeks or months. Certain it is that in the type of patient here considered a frank cardiac decompensation marks the beginning of the end. The majority die in less than a year from the onset of congestive failure, and it is the exceptional case that lives more than two years."

Nowhere is Dante's "All hope abandon, ye who enter here" more applicable than to those individuals in whom syphilis becomes apparent because of an aneurysm, aortic regurgitation or ostial occlusion. Treatment can not remove the permanent damage which is present; however, it may substitute scar tissue for inflammation, effectively stopping progress. Treatment should be used with the expectation that the cessation of the inflammatory process will ameliorate the symptoms and prolong life. In contradistinction to this gloomy outlook in late cases is the more optimistic picture in early aortitis. In the latter intelligent treatment will assure a continuation of physical activity and prevent the appearance of malignant complications[9].

SUSPECT SYPHILIS

Since an early diagnosis is so essential, it is self-evident that, if this disease is to be recognized in it incipiency, the suspicion of syphilis must always enter into every cardiac diagnosis. Suggestive or characteristic anginal pain, paroxysmal or nocturnal dyspnea, the sudden onset of myocardial failure in a previously well individual, increased width of aorta, an accentuated second aortic sound without present or past hypertension or an unexplained cardiac hypertrophy; any one or combination of these, in a patient under 50 should create an intense suspicion of cardiovascular syphilis. A history of chancre or positive Wassermann in addition makes the diagnosis more tenable. To await the definite, positive proof of complications is not only unnecessary but is also strongly to be condemned. To acquire an intelligent suspicion of syphilis, the great masquerader, is a commendable accomplishment. However, to resort to the easy diagnosis of syphilis to explain every case that presents some bizarre or baffling aspect is reprehensible, if satisfactory reasons can not be offered. Suspect, but do not condemn because of suspicion alone. If suspected, other confirmatory evidence of syphilis will undoubtedly be disclosed in the positive cases.

THE INITIAL LESION—THE CHANCRE

Rocognizing the difficulties encountered in the early diagnosis of vascular syphilis and realizing that its prevention, rather than cure is paramount, it is readily admitted that the correct time to start treatment is the moment the initial lesion is discovered. The initial lesion of cardiovascular syphilis is the chancre. Any genital lesion, subsequent to an admitted exposure, must be considered to be syphilitic until

proved otherwise. The utmost care must be taken to make a correct diagnosis of all suspicious lesions. Dark field investigations should be made of the serum from the sore or from a gland puncture. Negative dark field examinations demand repeated Wassermann tests during the first four weeks and at monthly intervals for the next four months. All of these examinations must be negative before any dubious lesion can be classified as non-luetic. Far too often it is forgotten that, in addition to gonorrhea, frequently a spirochetal infection is simultaneously transmitted, the latter hidden by the predominant evidence of the former. Since under such circumstances an intra-urethral chancre may remain undiscovered, the above routine of Wassermann tests should be done in every case of gonorrhea[10].

EARLY TREATMENT

When a definite diagnosis of chancre is made treatment should be started immediately. For the first four weeks both bismuth and neoarsphenamine are administered every seven days. Weekly injections of arsenic alone are used for the next month. The following four weeks only bismuth is used. The fourth course of weekly injections consists of both the arsenical and bismuth for the next month. This system of the overlapping and continuous use of both drugs must extend over a minimum of at least two years. Less than this is inadequate treatment. Inadequate treatment may permit the development of cardiovascular syphilis. The Wassermann test is to be done at the end of each month in which bismuth alone is used. However, it is of advantage to recall that it is the patient who is being treated and not the serology. A spinal fluid examination at the end of the first year of treatment and also before the discontinuance of therapy must be done. All treated patients should be instructed to have an annual physical examination during the remainder of life and above all should understand the importance of admitting the infection whenever subsequently a medical history is being elicited. The dignified respected patient of mature years is only too happy to forget the unfortunate venereal escapades of his irresponsible youth.

In a symposium on cardiovascular syphilis at a meeting of the American Heart Association, Udo Wile[11] emphasized the fact that arsphenamine is not the drug of first choice in the treatment of vascular syphilis. He declared, "Absorption of syphilic residua and replacement by fibrosis seem safer when slowly accomplished than when induced by energetic therapy. Iodide of potash and mercury, or more lately bismuth, in moderate doses have in my hands been happier choices than the arsenicals". Moore and Danglade[12] in a report of the results of treatment as observed in the Syphilis Division of the Medical Clinic of Johns Hopkins Hospital, read at the same meeting, were impressed with the great value of properly directed anti-syphilitic treatment. Their suggestion was: "Making all allowances for the fact that the treatment of cardiovascular syphilis is a problem which differs with the individual status of every patient, and which cannot be systematized as can, for example, the treatment of early syphilis, our present scheme is about as follows: If the patient is admitted with congestive failure or if he has pronounced pain or frequent attacks of paroxysmal dyspnea without failure, he is placed at rest in bed as promptly as possible.

The usual measures are carried out until compensation is regained, when treatment for syphilis is cautiously begun. Both the danger of therapeutic shock (Herxheimer reaction) and that of precipitating decompensation by the too rapid resolution of syphilitic inflammatory tissue (the therapeutic paradox) weigh against the initial use of any of the arsphenamine products. Treatment is started with bismuth and potassium iodide. The dosage of bismuth is usually small at first, 0.1 gm. every four or five days. If tolerated for four or five injections the dosage is increased to 0.2 gm. once a week. The dosage of iodides is rapidly increased to tolerance. This is continued for at least 10 to 12 weeks before any arsenical is used; and indeed whether or not an arsenical is ever employed depends largely upon the degree of cardiac reserve which the patient seems capable of accumulating. If this appears adequate, arsenical treatment is started after three months of preparatory treatment, the drugs of choice being neorasphenamine or bismarsen. The initial dosage is extremely small from 0.05 to 0.1 gm., and is cautiously increased at weekly intervals until the maximum 0.3 gm. is reached. "Courses are long 10 to 12 injections to a course. Treatment is continuous, courses of arsenicals alternating with courses of bismuth and the iodides, and is kept up for a minimum period of two years, and often indefinitely. It is desirable to avoid treatment reactions of any sort." If the patient's physical condition becomes satisfactory, long periods of rest may be instituted. However, it is wise to give a course of bismuth followed by one of arsenicals, once a year, throughout the patient's life.

A WORD OF CAUTION

A four plus Wassermann reaction, repeated and confirmed, is accepted as sufficient evidence for a diagnosis of syphilis. At the present time, an intensive campaign is in progress to discover, through routine blood tests, all of these cases. Though this drive is to be commended, a word of caution is necessary. Routine treatment of every case with a positive serology may result in untold harm. Vigorous therapy is advised for the

chancre, but similar treatment is not to be used when syphilis is discovered many years subsequent to the initial lesion. In these individuals a careful survey is to be made, in particular of the nervous and vascular systems. To cure the syphilis and kill the patient is not the purpose of the campaign to wipe out syphilis. In these individuals it is better to begin with a preparatory treatment, such as the one outlined by Moore and Danglade. This will greatly lessen the danger of any harmful reaction.

CONCLUSION

1. In cardiovascular syphilis prevention rather than cure is paramount.

2. Adequate treatment of the chancre is essential if cardiovascular syphilis is to be placed on the list of preventable diseases.

3. Intelligent publicity describing the dangers of inadequate treatment is needed to persuade the patient to accept and demand adequate treatment.

4. If specific therapy is to be of real value, an early diagnosis of cardiovascular syphilis must be made long before complications arise. This is always difficult and more often impossible.

5. A suspicion of syphilis should enter into every diagnosis. This disease is a great masquerader.

6. When the diagnosis of cardiovascular syphilis is simple and self-evident, all hope of cure is useless and only relief of pain and the prolongation of life can be expected from therapy.

7. Careful, individual treatment is to be instituted in every case whose syphilis is discovered many years after the disappearance of the chancre. This will prevent many unfortunate reactions in the campaign now being waged to eradicate syphilis.

316 MICHIGAN STREET.

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Pulmonary Emphysema

The onset of symptoms in emphysema is insidious. Profound changes may occur in pulmonary respiration with little or no discomfort to the patient. When symptoms do occur they are the result of interference with proper pulmonary expansion and ventilation. As a result, dyspnea and cyanosis are two of the most important symptoms of emphysema. The lungs assume a position of overexpansion; ankylosis of the chest wall and loss of elasticity in the air vesicles cause interference with expiration; hence, residual air is increased and vital capacity decreased. There is always too much air remaining in the chronically overdistended air vesicles. This stagnation of alveolar air brings about an increase in its carbon dioxide and a decrease in its oxygen contents. It is apparent, therefore, that profound changes take place in the gaseous content of the arterial blood; the carbon dioxide content increases to over 90 cc. volumes per cent, and the oxyhemoglobin saturation is correspondingly decreased to 80 per cent, with a proportionate increase in cyanosis. To compensate for the reduction of oxyhemoglobin saturation, polycythemia develops. Shortness of breath while the individual is at rest is not pronounced, but is rapidly increased on exertion. As the lungs lose more and more elasticity and overdistention increases they progressively tend toward the inspiratory position, and there is correspondingly increased difficulty in expiration.

This brings into play more and more the accessory muscles which are used in expiration. This, in turn, increases intrapleural pressure during expiration; normally this pressure is negative. As a result, venous pressure is greatly elevated. Serious disturbances of the circulation occur as the result of the increased venous pressure and right-sided cardiac overstrain. Both of these conditions are the direct outcome of the loss of pulmonary elasticity and increased intrapleural pressure. As the degree of pulmonary emphysema increases the venous pressure progressively rises and right-sided heart failure supervenes. Hypertrophy and dilatation of the right heart go hand in hand with the progress of the pulmonary lesion which is slow but inevitable. As respiratory compensation fails, the demand for hyperventilation increases, and the ability to ventilate decreases. In many cases of hypertrophic emphysema, chronic bronchitis with or without bronchiectasis develops. When these bronchial changes occur, coughing becomes an obtrusive symptom and clubbing of the fingers and toes is observed.—George Morris Piersol M.D., Philadelphia; The Pennsylvania Medical Journal, Vol. 41, No. 4; January, 1938.

PANHYSTERECTOMY

By WILLIAM H. WEIR, M.D., C.M., F.A.C.S., CLEVELAND, OHIO

THE title of this paper is intended as a symbol of a radical operative procedure, for we shall discuss not only some advantages of the total over the supravaginal operation but also its performance under certain conditions in which hysterectomy, of any type, is not usually considered necessary. The many additional operations performed at the same time as these hysterectomies here reported may be regarded by many as an evidence of radicalism.

Conservatism in operating upon the female genitalia has been generally taught, mainly so that the possibility of pregnancy be not impaired. Child-bearing is perhaps the most important function of women, and as a rule every effort should be made to preserve it. During the time when this is possible, operative measures should be avoided if simpler ones will answer, but if they are required they should be as conservative as possible. There are far too many unnecessary operations performed upon young women, for simple follicle cysts which usually disappear spontaneously, for retrodisplacements which might have been cured by a pessary, for small harmless fibroids, or even for pus tubes which, under appropriate treatment, may so resolve that pregnancy even may occur.

Operative measures cannot be entirely avoided during the reproductive period. Ruptured ectopic pregnancy, malignancies, certain other neoplasms and some infections may demand surgical aid. In other less urgent cases palliative treatment may prove insufficient and operation necessary, but the procedure should be as conservative as possible if the woman desires children.

RESULTS OF CONSERVATIVE OPERATIONS

The results of conservative operations on the female genitalia are often disappointing and further surgical work be required. This is not surprising since the normal physiologic changes in these female organs are so extreme, recur with such frequency, and are accompanied by such striking anatomic changes that no other structures in the body can compare with them. These fluctuations may easily overstep the normal limits and become pathologic. This is often due to endocrine dysfunction and a conservative operation upon such an affected organ may prove futile if the underlying cause remain uncorrected. If it persist, a recurrence of the original condition is highly probable. As our knowledge of the complicated endocrine mechanism increases, and the application of the principles involved becomes more effective, the need for operative procedures in the woman's pelvis will steadily decrease.

To maintain the ability to bear children is, therefore, the great reason for conservatism. There comes a time, however, when this function becomes relatively unimportant. The woman's age may prevent it, she may have as many children as she wishes or as she can possibly care for, or she may have some diseased condition which probably would prevent her becoming pregnant or endanger her life if she did. Under such conditions there is little excuse for being conservative if a radical procedure promises better end results.

The source of a large number of the most troublesome symptoms in a gynecological patient proves often to be the uterus. Hemorrhage, leukorrhea, and cramps are typical examples and are usually exaggerated at the time of the periods. The varied reflex troubles which promptly disappear when a retrodisplaced uterus is corrected, show what unusual symptoms may arise from this organ.

If therefore a womb is causing sufficient trouble, and if it be no longer needed for what some consider its sole function, childbearing, why tinker with it? Why, in a woman approaching the menopause, attempt to patch up an organ that is approaching senility and has, therefore, a markedly lessened recuperative power? Even in younger patients, if both tubes or ovaries have to be removed, why not remove the uterus as well, if there be the slightest chance of its causing later trouble? For these reasons, a good many years ago, I became more radical, removing the uterus in many cases in which I would formerly have conserved it. These hysterectomies were almost all supravaginal and although the end results were greatly improved, some patients would have persistent trouble with the remaining cervix. Panhysterectomy was therefore generally

Read before the Fourth Session, Ohio State Medical Association, 91st Annual Meeting, Dayton, Ohio, April 28 and 29, 1937.

The Author

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done, and since 1919 I have had very few supravaginal operations. A satisfactory technic was developed which has been employed for about 17 years but which was not published until 1931.[1]

Certain objections may be made to hysterectomy before the menopause. These usually come from the patient, but not infrequently from the family physician.

It is generally believed that the sexual feeling will be markedly diminished or often completely lost. An occasional patient may even believe that intercourse will be physically impossible afterward. Others feel that the husband will find them unsatisfactory for intercourse. Although I cannot quote accurate figures, I am convinced that very few show any marked lessening of libido. The majority report no particular change and there are, I think, as many showing an increase as a decrease. This is not surprising, for sexual desire does not rapidly cease with the menopause and it is to a large degree dependent upon the general health and sense of well-being, and both of these we hope to be vastly improved after the operation. An increase may be explained in an occasional patient by the fear of pregnancy having been removed.

Kretzschmar and Gardiner[2] investigated the effect on libido after both types of hysterectomy, with and without removal of both ovaries. The highest rate of decrease, 46.9 per cent, occurred after the total operation with removal of the ovaries. An increase was found in from 7.96 to 17.28 per cent, and it was unchanged in 45 to 58 per cent, depending upon the type of procedure.

The patient may fear that if she no longer menstruates she will, at monthly intervals, experience pain, discomfort, or other symptoms so often associated with delayed, scanty or skipped periods. It should be explained to her that in such cases the symptoms are probably due to the uterine congestion and swelling, which have not been relieved by the deficient menstrual flow, but if she had no womb to become congested, no flow would be necessary. In my experience it is very rarely, after a hysterectomy, that a patient complains of any unpleasant symptoms recurring at monthly intervals. If such occur, they will almost always be due to the ovarian tissue conserved, and if sufficiently troublesome could be cured probably by deep X-ray treatment of the ovary.

The patient may confuse the amenorrhea with the climacteric. If the womb is removed she believes she will at once start in with the change and either become thin, scrawny and prematurely senile, or else grow enormously fat and ungainly. It should be explained to her that if the ovaries are not removed her change may not begin for perhaps several years. She should understand that this is inevitable for every woman, that while sometimes rather distressing, it is not dangerous, is of limited duration and if the symptoms are severe, much may be done to relieve them. If the menopause must occur it may help to point out the advantage of having this unpleasant event behind, rather than ahead of her.

An inferiority complex, due to the premature climacteric, is said to occur but is unlikely. Some operators, therefore, with a subtotal operation leave a small amount of corpus mucosa to permit a slight menstrual flow. I have never met a woman, who, when further childbearing was impossible, and when the matter was explained to her, did not welcome the prospect of getting rid of the very messy, usually uncomfortable, and often unnecessary menses.

The foregoing objections to the removal of the uterus apply really to the corpus. Having decided to remove a uterus the question comes up whether to do a total or subtotal operation. The relative advantage of the abdominal and vaginal routes will not be discussed here, other than to say that the vaginal operation is particularly suitable in old women and in prolapse cases.

In the past, as today, the subtotal operation has been performed far oftener than the total, and in the majority of cases it will prove quite satisfactory. The advocates of this type of operation offer certain arguments against the radical procedure in benign cases with normal cervix.

1. It is more dangerous, especially as regards hemorrhage. There is a greater chance of this as the operation is more extensive than the subtotal, but with proper training and a good technic it can be avoided. It is no operation for the inexperienced. Secondary hemorrhage is no more likely than in any other major operation. None occurred in this series. The most difficult and therefore most dangerous part of a hysterectomy is the preliminary separation of adhesions involving the lateral structures, bowel and other viscera. These must be dealt with and be equally difficult in either type of operation. The relative mortality of the two operations is impossible to estimate acurately, but statistics show that, with competent operators, the mortality of the total is but slighly greater than the subtotal and in a few cases it is even less. The matter has been very thoroughly discussed in papers by Farrer[3] Fullerton and Faulkner,[4] Masson,[5] Meigs,[6] Richardson,[7] Siddall and Mack,[8] von Graff,[9] and others, who quote many statistics from the literature, from their own results, or from groups associated on various hospital staffs. It is very difficult to derive correct figures from these reports, some are for selected cases such as fibroids only, others exclude malignancies, still others are classified as complicated or uncomplicated. So far as one can see, the average mortality for the total operation

would be about 3.5 per cent, and about one-half to one per cent less for the subtotal.

2. Injuries to the ureters and bladder are more likely. This is true, but the subtotal operation is not free from risk to the bladder, and in this series almost all the bladder tears were at the vertex and probably would have occurred even with a subtotal operation.

3. There is danger later of prolapse of the vaginal vault. This should not occur if the divided uterine ligaments are reunited and sutured to the vaginal vault. Prolapse of the vault may occur after any type of hysterectomy from failure to repair a relaxed vaginal outlet.

4. Shortening of the vagina, interfering with intercourse, is said to follow the total operation at times. This may be avoided by dividing the vaginal wall close to the portio, sacrificing as little as possible. Vaginal contracture is occasionally seen after the menopause, even without operation, and removal of the ovaries with either type of operation might cause this result.

5. The longer time required for the total operation should not exceed five to fifteen minutes. Any cervical cauterization or repair, prior to a subtotal operation, would require probably as much or more time.

6. There is greater danger of postoperative complications. Owing to the wider separation of the bladder in the total operation, one would expect more vesical irritability or even cystitis. Bladder symptoms are rather frequent but are rarely severe or long continued. Goodall,[10] with about equal numbers of total and subtotal operations, found that 70 per cent of the total cases and 45 per cent of the subtotal ones voided spontaneously after operation. He also claims that the total operation has fewer immediate postoperative complications, fewer remote sequelae and that the recoveries are smoother. On our own service we expect to keep any hysterectomy case in the hospital for at least 14 days. In this series it averaged 15.7 days, excluding the fatal cases which averaged seven.

In favor of the total operation, one of the most important arguments is the increasing number of reports of cancer developing in the remaining cervix, the so-called stump carcinoma. von Graff[9] has collected 1169 cases and believes this fact alone would justify the routine performance of the total operation. Healy and Arenson[11] found 67 stump cancers, or 2.6 per cent, among 2600 cancers of the cervix at The Memorial Hospital, New York. Henriksen,[12], at Johns Hopkins, found 2.3 per cent in 940 cervical cancers. Farrer,[3] at the Woman's Hospital, New York, found stump cancer which had developed one year or more after operation in 7 per cent of the cervix cancers. Pomeroy[13] in 588 cases had 40 or 6.8 per cent. Peham is quoted as saying that cancer is 27 times more common in the stump than in women who have had no supravaginal hysterectomy. Meigs[6] in 1218 cervical cancers found 80 classified as stump cancers; 22 recurrences in the vault after panhysterectomy, 23 found within one year of operation and probably present at that time, and nine after subtotal operation for adenocarcinoma of the fundus. There remain 26 real stump cancers or 2.1 per cent. Of these 25 per cent were nulliparous, a very high proportion for cervical cancer in general. von Graff[9] found that 22 per cent of 300 stump cancers had never been pregnant.

Ratio of Stump Cancers

	Cervix Cancer	Stump Cancer	Per Cent
von Graff	4269	176	4.1
Healy	2600	67	2.6*
Henriksen	940	22	2.3
Farrer	-----	-----	7. *
Pomeroy	588	40	6.8
Meigs	1218	26	2.1*
Kretzschmar	1022	18	1.7*

*Developed after one year

To determine the actual incidence of stump cancer after operation is difficult as it would mean following up a large number of patients for a long period, even for 20 or 30 years. Scheffey[14] attempted this in 681 cases and found that 554 had been observed "at some time following the operation", of these five or 0.902 per cent showed stump cancer. He quotes reports from the literature covering about 20,000 cases giving rates varying from .039 per cent to .62 per cent.

The danger of cancer of the stump, therefore, seems definitely greater than in the average woman and furnishes a potent argument in favor of the complete operation. No stump cancer has been seen in my practice and it is only in the last few years that it has figured prominently in the literature. The frequency with which the remaining cervix caused leukorrhea or pain, influenced me more in adopting the total operation than the danger of cancer. The great majority of cases consulting the gynecologist have abnormal cervices, generally due to birth traumata, although many nullipara may show erosions, cystic degeneration, chronic cervicitis, or hypertrophy. Richardson[7] says, "Recent reports from some of our best obstetric clinics reveal that late follow-up examinations show unsatisfactory conditions of the cervix, and lower birth canal, in 50 to 75 per cent". Masson[5] reported from the Mayo Clinic 500 cases having trouble with the cervix after

subtotal operation, in which excision was required in half the patients.

While a cervix that appears perfectly normal may subsequently cause trouble after subtotal operation, there is not the slightest doubt that most of the ensuing trouble is due to neglect of cervices abnormal at operation, and which should have been either removed, or at least cauterized, repaired, or otherwise dealt with. Too often the operator fails to take a comprehensive view of the situation, he sees only the large fibroid, for instance, and ignores the lacerated cervix or relaxed outlet also existing.

The question of conserving the ovaries at the time of a hysterectomy is outside the scope of this paper but may be discussed briefly. After the menopause, it is unimportant. Prior to that the ovaries should be saved if they are healthy and if there be no good reason for their removal. The younger the patient the more reason for retaining them, so as not to risk lessening the libido. Near the menopause there is less excuse for leaving them in if they show any suspicion of trouble. Even if the change is certain to occur in the near future, it is preferable to have the convalescence uncomplicated by the more or less uncomfortable or even distressing nervous symptoms of the menopause.

So far we have discussed certain advantages of the panhysterectomy. There is another very important consideration and that is the advisability of performing as complete an operation as possible, so as to correct, as far as we can, all the abnormalities that may be adding to the patient's difficulties for, if attention is not given to these, the relief may be correspondingly impaired. One of the distinctive features of a pelvic case is the multiplicity of lesions in a single patient, all contributing to the disability and requiring several different operations for their correction. Thus, a patient having hemorrhages due to a myoma may also show a badly lacerated cervix, very relaxed pelvic floor with cystocele, rectocele and beginning prolapse and quite probably some large hemorrhoids. Internally, the lateral structures may be adherent and not infrequently the appendix may be diseased. How far one should go in operating upon these secondary conditions at the same time as a hysterectomy will depend upon the skill and rapidity of the operator, the competency of the anesthetist, but, of most importance, the age and general condition of the patient, and the way she has stood the work so far accomplished. The frequency of cervical lesions and the bad results from failure to deal with them has been pointed out. The neglect of perineal relaxations will do more to impair the results of a hysterectomy than almost anything else. Many operators have no appreciation of what the perineal support should be. Another factor is the inability to estimate the support accurately unless the patient is examined under complete anesthesia.

In my own work I have attempted to correct as many of these lesions as possible, to the extent that some of you may regard as foolhardy. Certainly I have deliberately violated the rules laid down by certain authorities, notably in removing the appendix at the same time as a Caesarean section or in the presence of a ruptured ectopic gestation. Nor would the removal of gallstones, immediately following a panhysterectomy, be countenanced generally. Some of the fatalities following my operations might have been avoided if less had been attempted, a question difficult to decide either way in a given case. The multiplicity of operations carried out in this series should be taken into consideration, however, when reviewing the mortality rate..

Operative Procedures Carried Out in this Series

	Number	Per cent
Abdominal Panhysterectomy, (Four Wertheim)	531	100.
Appendectomy, (Previously done in 124 cases)	406	76.4
Salpingectomy. Unilateral 69, bilateral 32	101	19.
Salpingo-oophorectomy. Unilateral 146, bilat. 150	296	55.7
Anterior Colporrhaphy	96	18.
Perineorrhaphy	348	65.5
Hemorrhoidectomy	57	10.7
Excision of Bartholin Gland	4	.75
Dilatation and Curettage, Preliminary	18	3.3
Hernia, Ing. 4, fem. 4, ventral 2, umbilical 18	28	5.2
Caesarean Section	6	1.1
Cholecystostomy	6	1.1
Cholecystectomy	15	2.8
Suture of Bladder Injury	9	1.6
Ureteral Anastomosis	1	.18
Abdominal Drainage, gall-bladder incisions only	21	3.9
Cul-de-sac Drainage, cigarette drains	20	3.7

To furnish some statistical data, a sufficient number of my own hysterectomies have been reviewed to give representative figures, and about 500 was considered a reasonable number. However, I found that in the years 1928 to 1936 inclusive, there was a total of 531 cases which are here summarized. During the same period 48 vaginal and only three supravaginal hysterectomies were performed, but are not included in this report. The great majority of these were private patients. Some, when first seen, were at once sent to the hospital, but the majority had been treated in my office for varying periods of time, sometimes for years. This was done to permit further child-bearing, to attempt a cure by palliative measures, or for other reasons.

The average age of the patients was 42.6 years. One, having uncontrollable hemorrhage from

atypical hyperplasia was 19. There were 22 between 20 and 30, most of them inflammatory cases. Two over 70, had cancer of the uterus and the same condition was found in six of the 14 patients between 60 and 70.

The following conditions were found

Fibromyomata	303
Carcinoma uteri, fundus	18
cervix	7
Sarcoma uteri, degeneration in fibromyoma	1
Bicornuate uterus, incidental	3
Prolapse of uterus	4
Pyometra	1
Placental fleshy mole	1
Pregnancy, Caesarean for uterine fibroid	5
Caesarean for ovarian fibroid	1
Ruptured ectopic	1
Therapeutic abortion	2
Complicating fibroids	3
Salpingo-oophoritis, unilateral	42
bilateral	110
Pyosalpinx, unilateral	7
bilateral	12
Hydrosalpinx, unilateral	5
bilateral	3
Parovarian cyst	1
cystocarcinoma	1
Hemorrhoids	57
Ovarian carcinoma	2
papillary cystocarcinoma	2
serous cystadenoma	2
pseudomucinous cystadenoma	5
papillary cystadenoma	5
dermoid cyst	8
fibroid	4
granulosa cell tumor	1
follicle cyst, large	84
endometrial cyst	20
Appendix, acute	2
acute perforative	1
chronic suppurative	1
endometriosis	2
carcinoid	3
adhesions, concretions, etc.	46
Relaxed vaginal outlet	348
Cervix, lacerations, etc.	265
Tuberculous peritonitis	2
Pelvic endometriosis	28
Cholelithiasis	20
Cholecystitis, chronic	1

Among the different conditions demanding the operation were found practically all the common gynecological diseases and neoplasms. A large proportion showed the end results of birth traumata: lacerated cervix with various complications, relaxed pelvic floor, cystocele, rectocele, varying degrees of prolapse, retrodisplacements, subinvolution, hemorrhoids, etc.

Fibromyomata were found in 57 per cent of the cases. While corpus cancer is said to be nine times, and cervix cancer four times more frequent in women with fibroids, I do not operate upon uncomplicated small or medium sized growths that are causing no trouble. In those of moderate size with excessive bleeding, but without other conditions demanding operation, diagnostic curettage is advised, followed by radiation if further bleeding demands it. In young women, if operation is required, myomectomy is done if possible.

Results in 25 Cancer Cases
in last nine years

		Alive	Died Postop.	Died Later	?
Over	Cerv	4	1	3	2
5 yrs.	Fund	4	1	0	0
	Cerv	2			
		17	0	0	1
Under			0	0	0
5 yrs.	Fund	7			
			2	3	3

Cancer of the uterus was found in 18 cases in the fundus and in seven in the cervix. The latter were either early cases or were considered corpus growths until they proved, after operation, to be cervical, situated at the internal os. The routine treatment of cervix cancers is with radium and X-ray. There were two postoperative deaths in the cancer cases, one from shock in an advanced fundus growth with extensive pelvic involvement, the other from embolus on the ninth day in a cervix case. This last is the only death, to date, in the cervix cancers. Three fundus cases have died from metastases since operation. Three cannot be located. The remaining 17 cases are alive and eight of these have survived over five years.

Sarcomatous degeneration was found in one fibroid. The later result is unknown as we have been unable to locate her.

Prolapse of the uterus is always operated upon by the vaginal route unless conditions require some abdominal work as well. There were four cases in this series.

The appendix had been removed at an earlier operation in 124 cases. In only one of the rest was it not removed in order to save time after a prolonged Wertheim operation. Many were quite normal. In the diagnosis table, under "adhesions, concretions etc.", 45 are listed but the number would be much greater if all minor abnormalities had been recorded.

Gallstones were removed in 20 cases and were encountered in several others in which operation was considered inadvisable. In one case of chronic cholecystitis death occurred on the twelfth day, due to a duodenal fistula resulting from the operation. In a patient dying of peritonitis after a secondary ileostomy for obstruction, gallstones had been removed at the original operation.

Hemorrhoids were removed in 57 cases but were not disturbed in others.

Injuries of the bladder and ureters are naturally more apt to occur with the total operation. A ureter was damaged in two cases. In one it

was cut across but was at once anastomosed with recovery and no leakage. In another, when closing the vaginal vault, a suture evidently included the ureter close to the bladder wall. A few weeks later a fistula developed but was successfully cured by reimplanting the ureter in the bladder at a later operation. The bladder was injured in 11 cases. Six of these were very slight, easily closed, and no cul-de-sac drain was considered necessary. Two were between one and two inches long and after closure a cigarette drain was inserted below. In one a vesico-vaginal fistula developed during the convalescence from a radical Wertheim operation and was supposed to be ischemic; it was repaired later. In another case after closure of the abdomen some vaginal bleeding continued from the vault. A stitch, passed from below controlled this but evidently entered the bladder for, during the convalescence, a fistula developed. She dismissed me for another surgeon before I had an opportunity to repair it. In the remaining case a tear about one cm. in length was not recognized at the time of operation, peritonitis resulted and the bladder lesion was discovered at autopsy. This was the only fatality in any of the 13 patients having a bladder or ureteral injury, 7.6 per cent. Rosenfeld[15] says that the mortality in bladder injuries during operation is variously reported as from 12 to 45 per cent. The great majority of the bladder injuries in this series were high up on the bladder, usually in adherent cases and often associated with large fibroids, and probably would have occurred even with a subtotal operation. Whenever such damage was recognized a retention catheter was employed for a week or ten days. Cul-de-sac drains were used in four of the ureteral and bladder injuries.

There were 14 deaths following operation, a mortality of 2.63 per cent which is lower than the average but not as low as some reported. If this summary included only the operations for the three years 1934, 5, and 6, there would have been 160 cases with only one death, a mortality of .62 per cent. In the last 103 cases of this series there was no death. Autopsies could be obtained in only four cases. Peritonitis caused death in seven, in one of these it followed a secondary ileostomy for obstruction, in another it was due to leakage through an unrecognized tear in the bladder, in a third peritonitis existed but the terminal event was probably an embolus on the fourth day. Postoperative shock caused death a few hours later in an advanced cancer involving both the fundus and a large adenofibroma, the patient was old and in very poor condition. Pulmonary embolism killed two patients, on the ninth and thirteenth day, when the convalescence so far had been very satisfactory. Bilateral pulmonary collapse, as shown by autopsy, caused death within a few hours in a simple case of fibroid. Probable thrombo-phlebitis of the liver with terminal pneumonia on the 24th day accounted for one case, no autopsy could be had. Bronchopneumonia and exhaustion on the twelfth day was the cause in a case with duodenal fistula following operation on the gall-bladder. In the remaining case death on the thirteenth day was attributed to pyocyaneus enteritis, which was confirmed by autopsy, about two feet of the upper jejunum showing extensive ulceration.

This report is not intended to advise the routine adoption of the total operation by every operator but it may prove of interest as a record of a considerable number of consecutive panhysterectomies, which also were practically unselected and routine, for the only additional hysterectomies during this series were three subtotal and 48 vaginal operations, the latter for prolapse in elderly women.

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DISCUSSION

Andre Crotti, M.D., Columbus: I am in complete accord with Dr. Weir when he says that ill-timed conservatism in dealing surgically with pathological uteri leads only to disappointing results; ill-timed conservatism does not relieve the patient fully, and leads to distant and recurring symptoms which too often demand a new surgical intervention.

Dr. Weir has well qualified his stand by stating that if the woman is in the child-bearing age, the surgeon should be as conservative as possible, especially if children are desired. To this we all agree. But he has also stated that there comes a time when the child-bearing function becomes of secondary importance and when surgical radical-

ism is absolutely indicated, and with this, I fully concur.

My line of conduct has been the following:

1st. The woman is below 30 and desires children, there is an unquestioned pelvic pathology demanding a laparotomy. In this case, if at least one ovary and one tube can be safeguarded, and the condition of the uterus warrants saving it, conservative methods are employed. If, however, both tubes must be sacrificed, then there is no reason why the uterus should be saved. If the tubes are so infected that they must be removed, it stands to reason that the uterus also is infected, since in most instances, the infection has been an ascending one. To save the uterus leads only to continued trouble, leukorrhea, retro-displacement, tumor formation, benign or malignant. Here the child-bearing reason does not enter into consideration any more. In consequence, total hysterectomy is performed.

2nd. The woman is above 30 and the question of children does not enter into consideration; there is a pelvic pathology demanding surgery. In this case I almost invariably perform a total hysterectomy, saving, of course, when indicated, at least one ovary, providing the latter looks normal.

I wish to emphasize a point of technic when attempting to save an ovary. If the blood supply of an ovary is interfered with, the ovary will undergo fibrous and cystic degeneration. Now, if one desires to insure its blood supply, it is best to safeguard the tubo-ovarian ligament and the tube with it, providing the latter is normal. The tube and the tubo-ovarian ligament are cut and tied at their uterine junction and later, when reconstructing the pelvic floor, the cut end of the tubo-ovarian bundle is attached to the respective corner of the vaginal vault at the point where the round and broad ligaments are implanted. This step is undertaken before peritonization is done.

Beside the persistence of leukorrhea which is so often observed when supravaginal hysterectomy is performed, and which in itself militates for the total operation as against the sub-total, there is another strong argument in favor of panhysterectomy, and that is, the cancer of the vaginal stump. Of those, I have observed 11 cases in which supravaginal hysterectomy had been done elsewhere. I am glad to state that I have made only very few supravaginal hysterectomies.

Now, if we stop to think that one out of every eight women after 40 years of age dies of cancer of the uterus, especially of the cervix, then it behooves us to adopt the panhysterectomy versus the supravaginal one.

I am glad to state that the dreaded injury to the ureters has never occurred yet in my experience. Only once did I injure the urinary bladder; this was easily repaired and no complication followed. Postoperative hemorrhage was never observed. Only once did a delayed moderate hemorrhage occur through the vagina, six days after the operation. I feel that shortening of the vagina is largely a "bugaboo". Although my mortality in earlier series was much higher, in the last 200 total hysterectomies, it has been 2.5 per cent.

I cannot fully subscribe to the idea of multiple operations, as practiced by Dr. Weir, in conjunction with total hysterectomy. We all know that he is a master surgeon. Perhaps, he can get away with it. Nevertheless, in my opinion, an added risk to a patient is warranted only when necessary; otherwise, it is better and safer to wait for a more appropriate time to perform a second major operation. I feel, however, that routine appendectomy in conjunction with hysterectomy does not entail added danger to the patient, and to that extent I routinely take this liberty. Perineal repair may also be done at the same sitting, providing the general condition of the patient at the end of panhysterectomy warrants it.

Intrathoracic Goiter: Differential Diagnosis

In the differential diagnosis of this condition we must consider the following possibilites:

1. Aortic aneurysm, as shown by a positive Wassermann reaction, a chest tumor that is expansile and pulsating; often a tracheal tug, which is never present in goiter, and there is here a constant angle between the tumor and aorta, which is unaffected by breathing or swallowing; this of course, is shown by fluoroscopy.

2. Thymus tumor is very rare in middle-aged adults.

3. Hodgkin's disease usually shows multiple glandular enlargements over the body, and the chest masses are at the lung hilum, not higher up. Blood studies and biopsy of a surface lymph gland should show the diagnosis.

4. Intrathoracic dermoids are dense smooth shadows, lower down in the thorax, and they have no cervical connection so they are unaffected by swallowing. They are most common at puberty.

5. Esophageal diverticulum has its symptoms connected with eating. Foul breath often occurs, and it can be readily diagnosed by seeing the esophagus fill with barium solution under the fluoroscope.

6. Lung tumor begins in pulmonary or bronchial tree tissue, not in the mediastinum. They are usually much denser than goiter, they irregularly invade lung substance, and hemorrhagic sputum is common.

7. Pott's disease of upper dorsal vertebrae can be correctly diagnosed by lateral and stereoscopic X-ray plates, showing involvement of the vertebral bodies.

8. Mediastinitis is usually an acute infection, either spreading down from the neck or out through the pleura, or possibly a part of general sepsis. Unless its presence is rapidly appreciated and suitable drainage instituted, death intervenes before the need for goiter differentiation occurs.

9. The so-called asthmas should be mentioned, namely cardiac, nephritic and idiopathic or allergic. Their differentiation should be very simple. —K. L. Johnston, M.D., F.A.C.S., Oskaloosa, Iowa; The Jour. of the Iowa State Med. Soc. Vol. XXVIII, No. 1, January, 1938.

The spectre of the spirochetes overshadows every illicit intercourse. Science, not faith, can dispel it.—Fetterman.

THE PHYSICIAN-PATIENT RELATION IN PSYCHOTHERAPY

By THOMAS A. RATLIFF, M.D., CINCINNATI, OHIO

ONE of the most important considerations in the procedure of psychotherapy is the physician-patient relation. Every doctor, particularly the psychotherapist, recognizes that there is an emotional attitude which exists between him and his patients. If he wishes to have the confidence of his patients or exert an influence over them he must have them like him. No advice or suggestion will be properly accepted unless the doctor has this positive effect. It has been proved for many years in hypnotic and suggestive therapy. If the doctor finds that his patient likes him, the treatment can be successfully continued. If, however, he finds that the patient does not like him, he will realize that his efforts will be in vain and that, unless the situation is met, he will lose his patient and face a failure. We should also consider in the physician-patient relation the emotional attitude the physician has to the patient. His feeling for the patient may have a decided effect on his ability to treat him. It is not too much to say that every physician is faced with these relationships in the treatment of all medical cases, particularly those of a chronic nature.

Psychoanalysis was at first reluctantly forced to meet the problem. For many years, however, it has given it the fullest consideration. Much of the psychoanalytic literature is concerned with what is termed the transference situation. Transference, in part, is the emotional attitude which is developed between the psychoanalyst and the patient during psychoanalytic treatment. There may be a positive, negative or a counter-transference.

In the positive transference, we find that the patient has developed a positive attitude to the analyst. This may manifest itself in degrees varying from friendliness to love. As long as the attitude does not offer itself as a resistance to the analysis, the analyst may not find it necessary to meet it. If, however, as an example, the patient falls in love with the analyst, it and all its implications are met by interpretation. Usually we find back of the feeling of love, repressed erotic desires which are mostly unconscious. In such a situation the strong positive feeling becomes a cause of resistance and a negative transference. The patient takes flight from the situation because of the unconscious erotic wish behind the feelings of love. So we find that the patient has set up a resistance to the treatment and, unless it is recognized and properly met, little progress will be made.

In the negative transference, the patient develops a dislike or negative attitude toward the analyst. This may vary in degrees from unfriendliness to hate. Such hostility is resistance and as such is a matter of great importance in the analysis. First the analyst must resolve it in order to continue the patient's interest in him and the treatment. More important, though, is the interpretation of the underlying unconscious implications of the hostility, especially as it has been displaced on the analyst. As an example, a patient may unconsciously identify the doctor with various imagos, the commonest being the father. However, the imago may be the mother or someone else with whom there has been an emotional relationship. Depending upon the attitude to the imagos at the time, the physician will find that the patient has a like feeling for him. This attitude may be hostile and thus cause a negative or hostile transference to the physician. With the proper interpretation of the hostility, it is changed to a friendly attitude. We then find the patient will progress with the treatment.

In the counter-transference, we have the emotional attitude of the analyst to the patient. Because of personal handicaps, the analyst may find that he does not have the proper understanding of the conflicts of the patient. This difficulty is largely overcome in psychoanalysis by the requirement of a didactic analysis on the part of every qualified analyst. In his own analysis the analyst faces his emotional conflicts so that he is able to recognize adverse attitudes and thus prevent them from obscuring a proper insight in his relationships. The analyst considers the counter-transference situation in every case he treats and so arms himself against any of its adverse manifestations which might rise in the treatment.

Every physician who treats the neuroses or comes in prolonged contact with a patient will recognize that some of the transference phenomena that occur in analysis will appear in his relationship to the patient. It must be borne in mind, however, that the transference phenomena in most of their manifestations can only occur

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under psychoanalytic technique, because, among other things, in this technique continuous free association is used. Many valuable observations, however, which have been made of the transference in psychoanalysis can be used in psychotherapy.

The positive attitude which a patient may develop toward his physician in psychotherapy has long been recognized. Many physicians inspire this attitude unconsciously and are successful in their work because of it. Others are failures simply because they cannot inspire this relation. Every physician when he contacts a patient soon senses whether or not he is liked. In some instances the doctor develops certain tricks to encourage this attitude. It is perhaps best developed by a patient and passive attitude on the part of the doctor. He must listen and then listen some more. Any impatience the physician may disclose in listening to the retailing of long tedious details is unfortunate. A doctor must be patient and be prepared to spend time with his client if he wishes to be successful in treating these conditions. If he will listen and listen long enough, say little or even nothing, this in itself may be sufficient to give great relief to the patient. This passive attitude together with careful observation of transference phenomena may suffice in many cases as a method of treatment. When there is an absence of this positive rapport, the patient will show that he is not interested in the efforts of the physician and so will pay little or no attention to any of his observations. On the other hand, when there is a positive rapport between physician and patient, even the simplest remark made by the doctor will be accepted by the patient. In every form of psychotherapy we must have a positive relationship between the physician and the patient. It is remarkable how little physicians have paid attention to these facts. It is not understood and therefore is put aside. Some doctors believe it is just their personality and an inherent ability to handle people which brings about a positive attitude on the part of their patients. Psychoanalysis has changed this in showing that it can be studied, understood and controlled.

Love and hate in varying amounts condition the attitude of people to their environment. In the normal adult there is a sublimation and understanding of these feelings, so that there is an adjustment to them which helps and does not handicap the individual. In the neuroses and many physical diseases, however, we see a regression to an infantile pattern of reaction. In the intimate contact he has with such sick people, the doctor is subjected to these intense attitudes and thus becomes the object of emotional reactions which express the patient's feelings for him. Because the patient is an adult and has a mature intelligence and body, the underlying emotional condition may be obscured, which may cause the physician to overlook the childish helplessness of the neurotic and not appreciate the meaning of their attitudes. With the establishment by the patient of a positive attitude, the physician is in a position of director and authority. He can thus become effective in his therapeutic procedures. If the patient does not like the doctor, the therapeutic task is difficult and little can be accomplished. Recognition of such resistance is important and should be met at once and brought before the patient by the physician. When the hostility is frankly and properly met, it will either be resolved or show definite reasons why the treatment will have to be discontinued. As long as the patient shows a friendly and interested attitude, no interference is indicated. If the positive attitude becomes too strong, however, it must be met before it becomes a hostile situation. Resistance, indicating an unfriendly atmosphere, shows itself in innumerable ways and can only be discussed briefly. The general attitude of hostility may be very evident and show itself at the first interview. Many times it is due to what seems to be a very trivial incident. We may find that the patient will try to talk you down or talk much about nothing. A frequent method of telling you how little he thinks of you is to criticize some one else or something pertaining to you. Of course, resistance is commonly shown when the patient comes late or leaves early or cancels an appointment.

In the treatment of nervous or chronic diseases, where the doctor comes in long contact with the patient, he should give serious regard to his attitude toward the patient. In the treatment of the neuroses, hostility on the part of the doctor will cause blind spots in his concept of the case. Such a condition will only lead to further misunderstanding and hostility. If the physician displays any sort of antagonism over a period of time toward the patient, even though done so unconsciously, he will lose the patient and have an enemy.

As has been suggested, there may be an unconscious basis for the transference situation whether it exist in the physician or the patient. If the patient has an unconscious hostility, the doctor may understand it. If, however, the unconscious negative transference cannot be recognized and the patient stops treatment, we should realize that there is an unconscious situation which we were unable to meet. It is sometimes impossible to loosen up such unconscious conditions, even though a special technique is used. In some instances the hostility may be worked through if we are patient and can take time. What may seem like an impasse may be entirely different in a few days. I have had patients leave treatment only to return later. In some instances they were able to understand their antagonism;

in others, although their attitude had changed, they did not know the reason. Many of these situations are due to the unconscious identifications which, as explained before, are made by the patient around the doctor. When unconscious phenomena are present in the transference, they should be interpreted to the patient when possible. In meeting the situation in this way, resistance will be resolved and a better understanding of the case will be developed.

In conclusion, I offer the fact that in the transference situation we have the greatest power for healing in psychotherapy. Careful study should be made in our treatment of all its manifestations, so that as our knowledge is enlarged, more possibilities will be recognized and reported. In the use of positive transference, an optimal level should be maintained. We should be able to recognize it in the individual case. Manifestations of love with its erotic implications must be handled properly. The negative transference is very important for back of it we find the resistance enveloped in the physician. Counter-transference may unconsciously be the cause of failure of the physician in his treatment and ought to be constantly kept in mind. One of the aims of psychotherapy must be to recognize the importance of transference and give it a proper place in whatever individual method one may use.

105 W. FOURTH STREET.

Modern Drug Therapy

DIGITALIS

Full therapeutic effects of digitalis are sometimes accompanied by minor toxic actions; that is, the therapeutic actions of myocardial and vagus stimulation become excessive and merge into toxic actions, according to dosage and other determining conditions. Controllable absorption of a digitaloid drug is therefore imperative. In chronic heart disease, however, with venous stasis of high degree, oral administration of digitalis sometimes fails because of faulty absorption. In this event intravenous strophanthin may be indicated, but only in the smallest optimal doses and with the definite idea of slow recompensation under strict and continuous observation. The main hazard involved is sudden overdosage because of previous digitalization which is not recognized. It is also dangerous to inject calcium chloride intravenously when the heart has been subjected to the effects of digitalis. Irregularities, fibrillation and even cardiac arrest may occur. Two deaths have been reported recently.

EPINEPHRINE

Epinephrine is another common drug which requires careful analysis in its use. The main actions of this drug are vasoconstriction, cardiac stimulation, vague stimulation and sympathetic stimulation. But this combination of effects may actually decrease rather than increase circulatory efficiency. Some state that more people have died from the effects of epinephrine than have been saved. How does this happen? There is a tendency to use the drug intravenously because of the local vasoconstriction which interferes with absorption. If an excessive dose is given, or if the ordinary dose is administered too rapidly and improperly diluted, there is extreme danger. In chronic cardiac insufficiency and in cardiac poisoning by chloroform, phenol, etc., epinephrine intravenously in minute amounts may cause cardiac fibrillation, dilation and arrest from the excessive load of the resulting increase in blood pressure and abnormal cardiac irritability.

STRYCHNINE

A further illustration of the changing views in pharmacology is the new conception of the action of strychnine, which is now regarded as largely an indirect respiratory and circulatory stimulant. The supporting effect on respiration is probably the result of increased carbon dioxide and heat production caused by the marked improvement in muscle tone. The increased intra-muscular pressure also provides a better return of venous blood to the heart improving the cardiac output.

MORPHINE AND OPIUM

Finally we may call attention to the confusion which has existed regarding certain actions of morphine and opium. It is well to remember that there are two chemically distinct groups of alkaloids in opium. The phenanthrene group is represented by morphine and codeine; the isoquinoline group by papaverine and narcotine. Both groups have more or less narcotic and convulsant actions. The essential difference is that the phenanthrene group stimulates and the isoquinoline group depresses all smooth muscle. Morphine, for example, in small doses causes constipation because of direct spastic tonus of the entire gastrointestinal trace, especially of the sphincters; and also because of diminished attention to rectal sensation and defecation reflex. Moreover, the asphyxia from toxic doses of morphine is in many instances the result of bronchial spasm as much as depression of the respiratory center. Pavarine on the other hand, relaxes smooth muscle spasm. —Robert M. Isenberger, M.D., Kansas City, Kansas; The Jour. of The Kansas Med. Soc., Vol. XXXIX, No. 1, January, 1938.

Inflamed matrices (thickened and distorted nail plates) of some finger-nails and toe-nails, without bilateral symmetry or regularity in sequence of digest may be psoriatic, but is very much more likely to be syphilitic if asymmetrical.—Noxon Toomey.

SEASONAL VARIATIONS IN THE INCIDENCE OF CARDIOVASCULAR DISEASE

With Special Reference to Respiratory Infections in Winter Months

By WILLIAM HALL BUNN, M.D., F.A.C.P., YOUNGSTOWN, OHIO

IT has long been recognized that there is a seasonal variation in the incidence of and deaths from circulatory diseases. The peak is reached in the period between September and May, as shown on the accompanying chart, and the low point is touched during the hot months. These fluctuations follow closely the curve of the acute respiratory diseases, which are the terminal complication in so many chronic heart conditions. In addition to this seasonal association with respiratory diseases there are other reasons for careful attention to the influence of the cold weather on diseases of the circulatory apparatus.

GENERAL CONSIDERATIONS—ARTERIOSCLEROSIS

Sudden changes in temperature and cold weather are a hardship for the advanced arteriosclerotic patient, whether he be suffering from cerebral, coronary, renal, extremity, or generalized sclerosis. The hypertensive group of patients is especially likely to increase in symptoms during the winter months. There are several influences operative in producing exacerbations of symptoms. Not the least of these is lack of opportunity for outdoor activity, even though this be limited to a slow daily walk in the open air. This exercise results in a better interchange of oxygen and subsequent improved metabolism.

The custom of overheating and dehydrating the atmosphere in the home is responsible for intensifying symptoms in some patients. The contrast in temperature between indoors and outdoors requires sudden thermal adjustments which the arteriosclerotic patient fails to accomplish quickly. He also expends energy to make his own heat. The troublesome atrophic dermatitis to which these individuals are subject is aggravated by the friction of heavy clothing and dried air. Cold wind often causes painful chapping of skin thus altered.

The more severe symptoms of arteriosclerosis, such as headache, eye pains, dizziness, profound fatigue, angina and intermittent claudication are frequently more troublesome during the cold months. A part of the tendency to increase in symptoms in winter is due to inadequate ventilation of the home. The fumes from open gas stoves, so commonly used by semi-invalids for accessory heat, causes sleepiness and lethargy.

Chilling of the body surface has long been known to aggravate renal damage and in the case of the nephrosclerotic this may be the incident which marks the beginning of kidney failure. In our experience those with hypertension and arterial renal damage derive the greatest benefit from spending the winter in a warm climate.

There is a well founded belief that infections originating about the accessory sinuses, the mouth and tonsils, so prevalent in winter, may cause kidney pathology. Years may intervene between the original infection and resultant effect on the cardiovascular system. Such degenerative diseases of the kidney finally affect the heart, because of the associated arterial hypertension produced by them.

THE ANGINAL GROUP

Many patients with angina are quite comfortable during hot weather but the seizures begin in the first cold days of fall. The pain threshold is lower and angina of effort results from less physical exertion than during the warmer season. Older individuals with some coronary sclerosis often first notice anginal pain while walking on a frosty morning. Cold air striking the body without physical exertion is enough to incite an anginal seizure in some patients.[1] It would be ideal to have all those suffering with angina to winter in a climate warmer than Ohio. Those who cannot afford such treatment can prevent attacks by dressing warmly, avoiding exposure and exertion on cold days, and riding rather than walking out of doors. The use of ultraviolet ray and gentle friction massage benefits the superficial circulation and makes attacks less likely. These instructions apply also to those who have peripheral vascular disease (angina of the legs). Attacks of intermittent claudication are not only more frequent but also more severe in cold weather. It is especially important that these individuals

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wear warm woolen stockings and carefully selected stout, roomy shoes.

RHEUMATIC MANIFESTATION GROUP

The etiologic factors favoring arterial changes predisposing to angina are not well understood but it has not been shown that they are influenced by cold weather. The same statements however cannot be made concerning the causes of rheumatic heart disease. It is now generally believed that a cold, damp climate does directly favor the onset of rheumatic manifestations. This is especially true of tonsillitis, chorea, growing pains, rheumatic arthritis and endocarditis. Rheumatic fever is much less common in the south and the hospital incidence of rheumatic heart disease is strikingly lower in New Orleans than in Boston. White believes five to ten times less.[2] It has been our custom for several years to advise convalescent rheumatic fever patients to spend the first winter after the attack in a very warm climate. The mid-south does not suffice. It requires the heat and sunshine of the extreme south to protect as far as possible against the ever present danger of recurrence. Rheumatic fever is marked by periods of latency and of activity. This tendency makes it advisable for some patients to take up their abode in a hot climate. Here again the practical and economic side of treatment often outweighs the ideal and most patients thus affected must remain at home. It is surprising, however, to find that now more families than ever before can arrange to send the convalescent out of this climate from October to May by the economies that can be applied to auto trailer existence. This is far from ideal but has been done successfully when another type of lodging was not possible.

For those whose treatment and convalescence is to be taken at home, air conditioning of the sick room is a decided boon. Control of temperature and humidity is now feasible. Add to this exposure to artificial sunlight, friction massage, adequate vitamin therapy, air baths and daily oxygen inhalation for three or four 20 minute periods each day and the disadvantages of home treatment are somewhat lessened. The plan of prescribing the cure chair regime, which is so effective for the tuberculous, can be modified for certain cardiac patients. A period in the sunlight is very refreshing for those patients who are not too debilitated. Warmy wrapped in blankets on a porch out of the wind such patients often lose their sick room pallor and convalesce more rapidly.

RESPIRATORY INFECTIONS

The common causes of increased mortalty among cardiovascular patients during the winter months are intercurrent diseases. By far the most important of these are the respiratory infections. Pneumonia stands at the top of this list. We have recently been enlightened concerning the role of pneumonia as a cause of heart disease by the contribution of Reugsegger working with Blankenhorn in a study of serum therapy for pneumonia at Cincinnati. He reports[3] "a clinical and bacteriological study of 19 patients with pneumococcal endocarditis". This investigator made the diagnosis by clinical means in a study of some 600 cases of pneumonia and confirmed it by necropsy in 15 instances. He cites figures from clinical material with acute pneumococcal infections to show that "endocarditis is one of the most important complications thereof, and occurs much more frequently than is commonly supposed". This is an important contribution for it transfers pneumonia from the accessory position to a principal role in the cause of heart disease. Even though the percentage of endocarditis as a complication of pneumonia may not be as high as he reports during every epidemic, yet we will hereafter be stimulated to examine our patients more carefully for signs of this important complication during the acute course of the disease.

Pneumonia is not likely to produce widespread changes in the myocardium, although this complication is occasionally seen. There are no characteristic electrocardiographic alterations attributable to pneumonia. Irregularities occasionally develop during the course of the disease and one sees heart block infrequently. Most observers agree that there are fewer disturbances of rhythm since the practice of giving digitalis to all patients with pneumonia has been discontinued. It is obvious that patients who already have chronic heart disease may develop pneumonia. If such individuals have been receiving a maintenance dose of digitalis this certainly should not be discontinued, in fact it may be advisable to increase the total daily ration.

Bronchiolar spasm or "asthma" is a symptom which may trouble the patient with pneumonia but more commonly is a complication of either purulent bronchitis or the winter cough of the aged. During the cold months acute asthma may occur in individuals past 40 who have never before had such symptoms. The differential diagnosis between this type and true cardiac asthma is usually not difficult. However, the fact is commonly overlooked that the cardiac patient with congestive failure may develop or have a recurrence of allergic asthma. The relief for this distressing symptom may often be found in the antispasmodic group of drugs.

Pneumonia frequently causes profound vasomotor collapse (peripheral failure). This is an extremely important complication requiring prompt treatment. The principal signs of this emergency are cyanosis and falling blood pressure. The best remedies are intravenous injections of 50 to 100 cubic centimeters of concentrated glucose in 25 per cent solution, repeated frequently if necessary. Adrenaline and

strychnine may be used. Digitalis is not usually effective. It may be used with hope of sucess only if myocardial failure with congestive signs appears. Alcohol is contraindicated because it causes greater relaxation of the peripheral vessels.

The convalescent period from pneumonia or other respiratory infections, particularly influenza, may be quite slow, especially if the attack occurs in mid-winter. Frequently these patients are unable to "get going" for several months, in fact until hot weather sets in. They have hypotension, poor skin turgor, little endurance, and are in depressed spirits. General tonic measures such as massage, fresh air, routine daily rest periods, encouragement and sunshine are more valuable than drugs in combating these symptoms of vasomotor dysfunction.

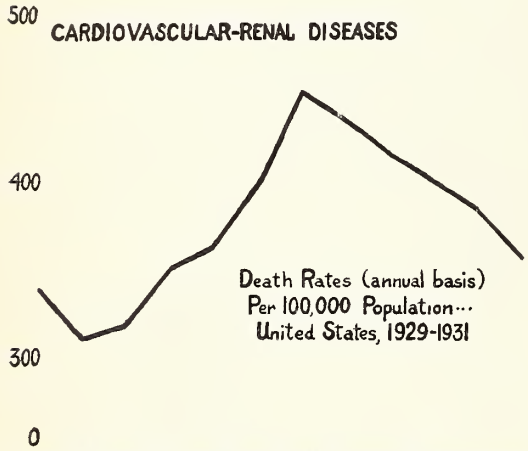


Chart prepared by Metropolitan Life Insurance Company.

Terminal pneumonia, the so-called "old man's friend" is more prevalent in cold weather. This is often recognized as the end stage of circulatory failure. However, pulmonary emboli are frequently the cause of this complication and a search for the possible source for such an embolus should be made. Extremity varicosities or pelvic venous thrombosis are a favorite site.

The annual bout of cardiac decompensation in the aged cardiac patient usually occurs between October and May. Even very slight respiratory infections have such a powerful influence that residence in a warm climate should be standard advice if there is any possibility of the patient accepting it.

Before advising change of climate for any patient there are two warnings which may well be considered: First, have patients get away before their disease is too far advanced. If there is no hope for improvement of symptoms or arrest of the process involved then we are remiss in our duty for we merely send them away to die. There are too many hopelessly ill patients urged to go south who would be much happier and more comfortable at home. Secondly, have patients make the journey in the early fall if possible. If they cannot afford this urge them to wait until late winter so that they can stay until mid-May. It is a common occurrence to have patients return after a healthful winter in the south only to come down with a severe or even fatal respiratory infection on their arrival home. They are apparently unable to quickly develop adequate resistance to our Spring crop of bacteria.

SUMMARY

1. A chart prepared by the Metropolitan Life Insurance Company shows that there is an increase in mortality from cardiovascular diseases during the winter months.

2. The arteriosclerotic, hypertensive, anginal, renal and peripheral vascular disease groups have more symptoms during this period and the death rate is higher.

3. The incidence of rheumatic heart disease is clearly greater in winter.

4. The influence of respiratory infections on mortality in cardiovascular disease is largely secondary but not entirely so.

5. Residence in a warm climate has distinct advantages for cardiovascular patients. Warning is sounded relative to proper time for return home.

6. Home treatment for those who cannot go south is suggested.

603 HOME SAVINGS AND LOAN BUILDING.

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Brucellosis

There has been a drop in the number of cases since 1934 when the greatest number occurred, but there was a large number in 1928 with a drop following that, so it is too early to say that the removal of diseased animals is already showing its effect in human brucellosis. For control of the disease in human beings, some method of immunizing exposed groups of people must be developed or diseased animals must be removed from herds of domestic animals. Due to the success of typhoid vaccination, it was hoped that a vaccine would confer immunity to brucellosis, but dead cultures have proved futile and it does not seem probable that live cultures of low virulence can be safely trusted for they are not accepted by all veterinarians for immunizing cows. It would seem, therefore, that our only hope lies in removing diseased animals from our herds of domestic livestock.—L. R. Woodward, M.D., Mason City, Iowa; The Jour. of the Iowa State Med. Soc.; Vol. XXVII, No. 12; December, 1937.

PARIETAL NEURALGIA

By WILLIAM BATES, B.S., M.D., PHILADELPHIA, PA.

IN 1901, the late Dr. John Berton Carnett operated on a woman patient for so-called chronic appendictis. The patient was not relieved of her pain. As this was his first private operation since finishing his interneship, he took the operative failure rather seriously.

Three months after this operation, the patient was brought back to Philadelphia. The surgeon called a gynecologist in consultation and the right tube and ovary were removed. The patient was back again within three months with exactly the same pain from which she originally sought relief.

This time, the examination of the patient standing with back and hips exposed, revealed the fact that the right leg was shorter than the left resulting in a left-right scoliosis of the spine. A lift was ordered for the right heel and the patient reported early relief of pain.

The surgeon died three years ago, but the patient is still living, still wearing a lift, and has not been operated on since nor has she had any recurrence of the right lower quadrant pain.

This experience led Dr. Carnett to teach that one should never cut into an abdomen without examining the back, but when he was cross-examined his answers were vague, as to what one might find, and what one could do to afford the patient relief.

By the time the author came under his teaching in 1913 he had evolved a dictum, "If the tenderness connected with the area of pain of which the patient complains, overlaps the anatomic confines of the cavity containing the suspected pathology, reconsider your diagnosis before operating". By that he meant that when a patient placed his hand partly over the lower abdomen and partly over the thigh and said "my pain is here", and on palpation he was found to be tender not only over peritoneal confines, but below the peritoneum on the anterior surface of the upper thigh, then it did not seem logical to suppose that anything within the abdomen could give rise to that distribution of pain and tenderness.

By this time his hesitancy to operate on cases of so-called acute appendicitis and on many cases of so-called chronic appendicitis was based on some physical findings rather than merely following a hunch.

The activities connected with the war interrupted much of this line of thought. In doing surgical dispensary work after returning to civil practice, we found a number of cases in our general surgical dispensary who complained of breast pain. Where there was no evidence nor suspicion of a mass and no palpable nor visible inflammatory changes taking place, these cases were treated with high frequency electricity in the hope of relieving their pain.

In examining many of these patients, we found that we could elicit nerve trunk tenderness high up on the dorsal region. In fact, many times heavy pressure there would recreate or intensify the breast pain. This was definitely hooking up the front of the chest with the back very much as the abdominal tenderness had been hooked up to the back.

In 1926 after a great deal of reading and 25 years of careful observations in a large surgical practice, Dr. Carnett produced a paper entitled "Intercostal Neuralgia As a Cause for Abdominal Pain and Tenderness".

The term "intercostal" proved misleading because most people were not familiar with the fact that the nerves supplying the abdominal wall were the lower sixth dorsal and first lumbar nerves.

He described a simple two stage bedside test which really should have been called the "Carnett Test". This test was as follows: The abdominal examination is made in the usual manner after getting the confidence of the patient's abdominal muscles. Tenderness in many cases is elicited when the fingers are deep in the abdomen, but that does not necessarily mean deep tenderness.

The second step of the test is to keep the fingers over this tender area and ask the patient to tense his abdominal muscles either by raising the head or the heels with the knees extended, and then press with the fingers again. If all tenderness disappears on pressure with the abdominal wall tight, it is fair to assume that the tenderness was probably sub-parietal, but if tenderness still persists then certainly some, if not all, of the tenderness is within the abdominal

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Read before the Academy of Medicine of Toledo and Lucas County, December 3, 1937.

wall. Curiously the patient may complain of pain in only one area of distribution of a peripheral nerve but all the areas will show tenderness. For instance, the ilio-hypogastric and ilio-inguinal branches supply an area over McBurney's point; another area on the anterior abdominal wall parallel to Poupart's ligament. A fourth area is high up in the groin on the inner aspect of the thigh. These two nerves arise from the twelfth dorsal and first lumbar nerves as the anterior branches. The posterior branch provides for the pain sensations of a portion of the gluteal region. That portion extends from the sacro-liac joint to the mid-axillary line and from the crest of the ilium above to a line parallel to the floor, with the patient standing, from the top of one great trochanter to the other.

With all these areas tender when a patient complains of pain in the right lower quadrant, tenderness in these other areas should arouse suspicion that the explanation may not be that constantly accused offender—the appendix, and when the appendix has been removed, adhesions should not be our first thought.

If in examining a case, one finds tenderness of places not immediately related to the area of pain, tenderness on palpation when the abdomen is relaxed and the tenderness persisting when the muscle is tightened plus pinch tenderness done by pinching a liberal fold of skin and fat between the thumb and index finger, the possibility that there may not be an acute visceral condition present, must be borne in mind.

We think it would be safe to say that fully 50 per cent of the cases of abdominal pain have pain in the parietal wall instead of in the visceral contents of the abdomen.

As our studies have led us far beyond the abdominal wall into the realm of pain simulating all types of cerebral pain, scalp pains, face pains, neck pains, chest pains and extremity pains, we feel that the term parietal neuralgia is much more appropriate than the original term—Intercostal Neuralgia.

When this picture was described originally it was not intended to be interpreted as a disease, but rather as a symptom complex. Until we were entirely familiar with the methods of making a definite differential diagnosis, we were cautious about refusing to operate on cases that were referred for surgery. We do not teach our graduate students to refuse operation until their own operative observations warrant it—except in cases where reasonable proof of parietal diagnosis exists and operation would jeopardize the life of the patient.

The symptoms of parietal neuralgia may be transient or may persist over a long period of years. They may be constant or sporadic. The severity of the pain varies with the individual and frequently in the same individual. Parietal neuralgia of the abdominal wall is most commonly not diagnosed as neuralgia, but is generally regarded as an indication for operation for some intra-abdominal lesion or is interpreted as some vague neurosis.

The abdominal tenderness due to intercostal neuralgia calls for vigorous pinching and poking, to enable one to make a diagnosis which does not call for operating on the patient. Of course this whole discussion suggests that we have not reviewed the teachings of Sir James MacKenzie, especially the so-called Head-MacKenzie Theory. As a matter of fact we have not forgotten them, but have carefully studied them and have discarded the whole theory as untenable. As you know both men with their names attached to the theory have already discarded it as a workable theory.

A curious thing about this parietal neuralgia of the abdominal well is that it may exist by itself or co-exist with, and confuse, a real intra-abdominal picture. However, when associated with acute appendicitis even though suppurative, the neuralgia seldom clears up when the supurative appendix is removed.

We have found that the usual causes for the parietal tenderness are:

1. Infection above the clavicle—in other words, upper respiratory. 2. Trauma. 3. Poor posture. 4. Arthritis in people past 40. 5. Malignant metastasis of the spine. 6. Any combination of two or more of these factors.

A patient may have a poor posture for 10, 20 or 40 years and have no pain, then an acute process of infection or a trauma occurs and the patient may develop pain. The clearing up of the superimposed factor (infection or trauma) is not sufficient to relieve the pain once it is started. It is necessary to correct the posture to afford the patient relief.

Many of these people with parietal pain are called neurotics, fakers or malingerers. Frequently they received insufficient medical attention. The longer a patient complains of pain the more likely that the pain is parietal instead of visceral.

We have seen several cases diagnosed as drug habitues who would be willing to submit to a 24th-25th or 26th abdominal operation in the hope of being freed of pain. Several of these we have found were true parietal neuralgia cases and still had the original pain for which the first abdominal operation was performed.

A knowledge of peripheral distribution of pain will frequently determine whether a man is actually malingering for compensatory purposes. For instance, if a man complains of tenderness over the first lumbar nerve posteriorly following a history of back trauma and shows no tenderness present in the anterior distribution of the first lumbar nerve, the man is malingerering.

In 1928 the author found that the area of pain of which some people complained was colder to the examining hand than the same area on the opposite side of the body. Notes were made of this, but it was not reported. Recently it became frequent enough to cause us to think of reporting it, and we found that the observation had reached the Russian literature in 1919; the British literature a little later and in the experimental laboratory of the University of Pennsylvania several years after that. To my knowledge, however, no one had attempted to determine the surface temperature in relationship to the areas of pain and tenderness, in actual patients. Today, we are doing just that, and if a man has a complaint of pain associated with tenderness which responds to the skin-fat-pinch-test and yet the thermocouple reading is the same as that of the corresponding point on the opposite side of the body, we can safely say that that person is malingerering.

In this statement we have definitely stated that we can do this when the skin-fat-pinch-test is absent. One must clearly differentiate between pain and tenderness and our test holds true only where pinch tenderness is found in the same area where the patient complains of pain.

Before in this paper, we have stated that our studies have taken us beyond the abdomen into the region of the heart, the neck, the chest, and the extremities. One of these studies has taught us a very interesting fact in the case of angina pectoris and that is that no matter how severe the pain may be in the chest and arm during an acute attack there is no tenderness to pressure, no pinch tenderness present in the areas of pain.

Angina pain is true referred pain. Therefore, we have learned that true referred pain is a sensitive, and it helps to nullify the Head-Mackenzie Theory for most of their areas of so-called referred pain were also areas of tenderness.

It is perfectly true that viscera pressing against the anterior parietes may set up an irritation along the course of a parietal nerve and tenderness may be found in the superficial branches of that same nerve. Cases with tenderness along a branch of the same nerve are those cases with a very definite visceral picture as compared with those that have the theoretic spill-over claimed by other writers.

Many interesting facts about abdominal tenderness came to our attention. Among these findings was the fact that tenderness elicited only when the finger had pressed the anterior abdominal wall over McBurney's point directly downward against the posterior abdominal wall with the patient in supine position, was due to tenderness of the superior aspect of the sacro-iliac joint and could always be found in the opposite side of the body. We are absolutely convinced that a great many such cases have been opened for so-called deep lying chronic appendicitis. Another of these factors that we found was that tenderness along the mid-line of the abdomen called by older writers "aortic tenderness" could be gotten by touching lumbar vertebrae through the anterior abdominal wall without pinching the aorta. The cases with this picture invariably have a marked lordosis and the chronic strain of the lumbar ligaments accounts for the tenderness along the whole lumbar spine.

We have found that parietal neuralgia confuses for appendicitis both chronic and acute; for aortic tenderness and for angina pectoris. Many of the cases of pseudo angina are really cases of parietal neuralgia. Other areas of pain and tenderness were searched for other diagnoses that might be included.

We say confusing for chronic appendicitis because the more we see of parietal neuralgia, the more certain we are that cases that are operated on for long standing pain in the region of the appendix are probably due to neuralgia rather than an inactive appendix.

Again we say confusing for acute appendicitis because the patient may have fever, leucocytosis, tenderness, pain and nausea all due to toxicity of sore throat interpreted because of tenderness over McBurney's point as an acute appendix. In these cases rectal tenderness and a true rigidity can not be found.

The determination of rigidity in these cases is sometimes rather difficult, but there are two things about eliciting rigidity:

One test is to watch the abdomen as the patient breathes, if the rigid abdomen stands still as the patient breathes the rigidity is probably due to some inflammatory lesion within the abdomen.

If the abdomen moves with respiration, the rigidity is probably referred from some pleural irritation and accounts for the frequency of a normal appendix being removed and followed by a frank pneumonia being found shortly after operation.

The author's test for determining rigidity is to place the fingers on the skin of the abdominal wall farthest from the point where trouble is suspected and with an up and down motion of the wrist to try to get the abdominal wall vibrating without removing the fingers from the skin. Having gained the patient's confidence, gradually approach the area under suspicion. Starting the wrist motion again it is found that if the rigidity is referred from the chest or was a protective rigidity due to fear, that the vibration sets up no increase pain, the muscle soon relaxes and vibrates as did the other side of the abdomen. If the rigidity is real and due to the underlying inflammatory lesion, the more one attempts to move those spastic muscles, the more irritating it becomes, the more rigid it becomes, and the wrist is not free to move the abdominal wall up and

down. In other words, the interpretation of rigidity reaches one from the wrist rather than from the finger tips.

Now to call your attention to some of the gall-bladder cases who have been operated on with the persistence of the same symptoms after the gall-bladder was removed. The old adage of "fair, fat and forty belches gas" certainly no longer holds for gall-bladder disease.

In the first place "fair" is off the list due to the help of the chemist and to the fact that gall-bladder disease is quite prevalent in the negro race.

"Fat" is out as many of our proved gall stone cases, as well as cholecystitis without stones may be slender individuals.

"Forty" is out, as gall-bladder disease is frequently found below 20 and in young mothers is quite common under the age of 25.

"Belches gas" is out because it is a symptom of parietal neuralgia; it is due to the patient swallowing air and then emptying the stomach in an attempt to relieve the distress of a tender belly wall.

Certain pains to the right shoulder were formerly considered definitely identified with gall stones. In a large series of cases let us state that reference of pain to the shoulder is a parietal phenomenon. It may exist with or without gall-bladder disease, with or without stones, but a gall-bladder with stones giving reference of pain to the shoulder does not do so unless the patient also has parietal neuralgia. When we run across this combination of intra-abdominal pathology with parietal neuralgia we are very careful to put ourselves on record, that the local tenderness will probably not be relieved by the operation. To tell the patient this, is discouraging, and poor psychology, so like your cancer problem, we had better communicate this information to the most stable member of the patient's family.

A pre-operative record of that sort will frequently help to offset the conception on the part of the patient that adhesions or new stones are causing the pain which they feel post-operatively, whereas we know that the pain is the same that they had prior to operative procedure.

The complaint of pain after operation leading to the thought that the operation was not successful has brought us to the conclusion that parietal neuralgia existing with or without concomitant visceral pathology probably accounts for more recorded operative failures than any other single factor. This is particularly true in all types of cases where the operation was performed for the relief of pain as the cardinal symptom. Likewise, we believe that many of the bazaar findings listed as post-operative complications were brought about by parietal neuralgia. For instance, a sore throat with its fever, leucocytes, hurried pulse, nausea, vomiting and tenderness over McBurney's point may be operated on for appendicitis without ever noting an incipient sore throat. A day after operation a full blown streptococcic throat or follicular tonsillitis appears and is considered a complication or sequela of operation rather than a condition that existed prior to operation and left to a wrong diagnosis.

Frankly, while surer of ourselves when attempting to make a diagnosis before knowing anything about parietal neuralgia, we will not attempt to diagnose an abdominal lesion without first blocking off the over-lying tenderness with local anesthesia.

With an appendix this is comparatively simple. We try to deposit some novacain about the ilio-inguinal and ilio-hypogastric nerves at a point one inch in from the anterior superior iliac spine on a line from that point to the umbilicus. A bilateral block for bimanual pelvic examination has proved quite valuable.

Novocain is inserted by having the patient on his back, have him tense his abdomen and we thrust the needle, perpendicular to the floor, just beneath the fascia of the external oblique muscle.

Four to five c. c. of 2 per cent novocain will anesthetize (in two minutes time) that portion of the abdominal wall supplied by those two nerves. If all tenderness disappears then all tenderness was formerly parietal; if tenderness persists when anesthesia of the anterior abdominal wall is completed, then the tenderness is due to visceral pathology. There is no danger in doing this test as in cases of acute appendicitis without parietal neuralgia. We have injected novocain and found that when the anesthesia of the abdominal wall occurs, the tenderness of the inflamed appendix is more marked because it has lost the normal protection of the overlying abdominal wall.

In diagnosing a gall-bladder disease the history, X-rays, drainage, laboratory and chemical findings are much more important than local tenderness. When parietal tenderness is present, we can block off three dorsal nerves and eliminate the parietal tenderness, and thus obtain a more satisfactory palpation of the gall-bladder region.

The so-called J. B. Murphy test for gall-bladder disease is present only when there is overlying parietal neuralgia. It can be elicited in numerous cases where the gall-bladder has been removed and the neuralgia not controlled.

As a result of those confusing pictures caused by overlying abdominal wall tenderness, we are prone to speak of pseudo appendicitis, acute and chronic, pseudo cholecystitis, acute and chronic. Much of the tenderness attributed to colitis is

really parietal neuralgia, as is much of the so-called renal soreness.

Much more interesting phase of this tenderness has proved to be the simulation of incipient inguinal hernia, lumbago, dorso-lumbar sprain, sacro-iliac sprain and lumbo-sacral sprain. [9, 19, 22, 23]

We have found by anesthetizing the first lumbar nerve on the side affected, that many cases diagnosed in the first mentioned group will be quickly relieved and with their sprains are able to return to work or in the case of the suspected hernia, pain disappears and no hernia develops.

The differential point in the inguinal hernia group is to invaginate the scrotum with the index finger and pinch the tissues overlying the external ring between the index finger and the thumb. In the absence of a mass, weak ring or impulse on coughing, this is sufficient evidence to suggest parietal neuralgia. As a result of the simulation of strains and sprains of the back, we have the explanation of many of the so-called "Railway Spine" cases showing nothing by X-ray and the patient being called a malingerer.[9, 13]

Recently, since the death of Dr. J. B. Carnett, Dr. B. D. Judovich and I have produced numerous papers concerning this same subject in which we have tried to show that faulty body mechanics frequently give rise to errors in surgical diagnosis.[17, 23]

We have gone into the question of the back pains rather extensively and have tried to show that by straightening the spine and injecting with novocain as a differential test that we have arrived at a more satisfactory diagnosis than formerly. We have taken the liberty also of trying to change the name from "Intercostal Neuralgia" to "Parietal Neuralgia" as not only the lumbar nerves do not suggest intercostal distribution, but the termination of the lower sixth intercostal nerves on the abdominal wall is also misleading. Likewise, pain in the extremities and pain in the head are frequently surface pains that can be controlled by spine correction and local injection, and follow the same rules that we have laid down about intercostal neuralgia of the chest wall and the abdominal wall. For instance, many of the headaches we encounter are scalp aches rather than brain aches, and injection of the occipital nerves frequently offers prompt relief. Therefore, we feel that we should refer to this whole picture as parietal rather than intercostal neuralgia.

In describing this condition, its symptoms and part of the treatment, we do not want to be misunderstood. We are not dealing with a separate disease but rather a symptom complex due to toxic absorption, poor posture, trauma, arthritis of the spine or malignant metastases to the spine.

Treatment is directed at the underlying cause and the injections are given for relief, until the underlying cause can be eliminated.

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Blood Transfusions

(1) Increase the serum protein, hemoglobin and red blood cells of the patient. This increase in red cells improves the oxygen and carbon dioxide carrying capacity of the blood.

(2) Blood from a healthy donor undoubtedly contains some antitoxin or antibodies which neutralizes toxins.

(3) Transfusions have a latent effect of stimulating the reticulo-endothelial system.

In my experience, blood transfusions have been the most reliable therapeutic procedure.—R. C. Shanlever, M.D., Jonesboro, Ark.; The Jour. Ark. Med. Soc., Vol. XXXIV, No. 6, Nov., 1937.

THE TREATMENT OF RINGWORM OF THE FEET

By HOWARD J. PARKHURST, M.D., Toledo, Ohio

PROBABLY almost the entire adult population carry the ringworm fungus on their feet, whether they have acquired it in gymnasium or golf club locker rooms, around swimming pools, in shower baths or on the bedroom or bathroom floor at home. This hardy vegetable parasite lives in the epidermis and nail substance. Its spores can survive for as long as 25 years on glassware, and they resist many of the strongest antiseptics. It thrives in an atmosphere of warmth and moisture, and therefore is likely to abound between the toes which are in closer apposition, especially the fourth and fifth toes, and to flourish and spread during the warmer seasons.

Many persons merely act as carriers of the fungi, but those who are susceptible develop clinical signs of the infection. The most common manifestation is slight scaling, bogginess or fissuring of the epidermis between the toes, especially between the fourth and fifth toes. Usually this persistent condition is the only visible evidence of the infection, and the patient is likely not to be aware of its presence. Yellowish discoloration and crumbling of the toenails, of very common occurrence, are considered to be manifestations of infection here. In warmer weather especially, when the fungi in the epidermal layers and nail substance take a new lease on life, small scattered itching vesicles, often in eczematoid groups and followed by scaling, appear about the toes and on the soles. Also there may be itching eczematoid outbreaks in circumscribed patches on the hands, and often small groups of tiny vesicles appear on the sides of the fingers (hard to distinguish from dermatitis venenata) and deep pruritic vesicles in the palms. Many patients presenting these symptoms on the hands are not aware that the feet are involved; therefore the feet must be examined routinely in all cases. Usually the causative organisms may be found in the roofs of the vesicles on the feet and in scales obtained between the toes, as well as in scrapings from the toenails, but seldom in lesions on the hands. The vesicular, eczematoid and keratotic patches on the hands are considered as a rule to be allergic manifestations occurring as a reaction against fungi from the feet which are circulating in the blood stream. Therefore in order to stop these outbreaks the feet must be treated, to destroy the focus of infection.*

Submitted Dec. 28, 1937, at request of the Editor.

* This is intended to be a brief practical paper on the subject of **treatment**, and its scope does not include the various points in differential diagnosis which are well discussed in all modern textbooks on Dermatology. It is realized that yeast and bacterial infections may produce clinically identical eruptions on the hands and feet, and various plants and chemical irritants may cause similar outbreaks on the hands. Even patch and intracutaneous tests with fungus extracts are likely to be misleading. Diagnostic errors may occur, but the treatment outlined in this article is antiseptic and protective and is generally helpful in spite of such occasional mistakes.

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PREDISPOSING AND AGGRAVATING FACTORS

These outbreaks are more likely to develop in the presence of hyperidrosis, or in feet which are kept too warm by woolen hose or by heavy shoes. Most men invite trouble by wearing solid leather shoes (instead of the much cooler perforated shoes) during the summer, while women wear lighter and better ventilated footwear and are less frequently afflicted[1]. In the winter galoshes are often worn during long shopping trips through warm department stores, and the automobile heater is often directed against the feet. Mild degrees of circulatory stasis due to prolonged standing or to fatigue seem to favor cutaneous outbreaks, and of course this condition is aggravated by constricting garters and by the presence of varicose veins. If the shoes are too tight or the feet deformed (as in cases of hallux valgus) the toes are forced too close together and the fungi are thus encouraged to flourish. It has been stated that hyperidrosis is likely to occur in flat feet[2].

An important aggravating factor is the irritation of the feet and hands by strong remedies which injure the skin and thus break down its resistance. Also it is likely that intercurrent infections may aggravate the skin condition[3], and at times relief of stubborn outbreaks on the hands has followed the removal of infected tonsils or teeth.

COMPLICATIONS

Troublesome secondary bacterial infection and occasionally dangerous lymphangitis may occur as complicating factors. Varicose eczema below the ankles constitutes a stubborn complication requiring special attention. Tender plantar warts may appear, and their outer layers may harbor fungi. The feet may become (apparently secondarily) sensitized to shoe dyes and the hands to various chemical substances handled in house-

work or in the industries[4], as well as to various antiseptics and ointments.

TREATMENT

Treatment, to be successful, not only must combat the infection but also attempt to remove predisposing and aggravating factors and prevent complications. If a patient presents moist eczematoid, acute vesicular or purulent lesions (on the feet or hands and adjacent areas), the application of constant moist compresses of a 1:2000 solution of potassium permanganate, during waking hours, will usually bring improvement. If there are signs of edema, lymphangitis or varicose eczema, rest and elevation are essential while the compresses are being used. The potassium permanganate solution may also be employed in the form of a moderately warm immersion of the affected parts for 20 minutes, night and morning, preceded by a brief soap-and-water bath and the gentle removal of scales and crusts and entire tops of all vesicles. If this solution seems to produce irritation a saturated solution of boric acid may be employed as a temporary substitute. If there is much burning or itching, or pronounced edema, moist compresses of a saturated solution of magnesium sulphate may be applied alternately with the antiseptic solutions. Stains due to potassium permanganate may be removed by sponging with cotton soaked with a saturated solution of oxalic acid, followed by immediate rinsing with running water. This may be omitted if too irritating. All affected areas may be washed with mild soap (such as pure Castile soap) and water, at least once a day with benefit, and as often as needed for purposes of cleanliness and for the necessary removal of scales and crusts. All traces of soap are to be rinsed off with fresh water, and the skin is dried by patting, not by rubbing. The applications may then be used (liquid, paste or ointment, as required).

At night, and whenever the moist applications are not in use, a soothing paste or a mildly antiseptic antipruritic ointment may be employed. The following are useful examples:

(1) ℞ Menthol. gr. ij 0.12
Thymol. gr. xv 0.9
Pastae Lassar. (without Acid. Salicylic.) q.s. ad oz. ij 60. M.
Sig.: Spread on gauze in a layer as thick as a half-dollar and apply; may be removed from skin with olive oil before washing.

(2) ℞ Phenol. gr. x 0.6
Menthol. gr. j 0.06
Thymol. gr. vijss 0.45
Ung. Zinc. Oxid. q. s. ad oz. j 30. M.
Sig.: Apply in small amounts, rub in gently, wipe dry with cotton and add a little plain talcum.

(3) ℞ Phenol. gr. x 0.6
Menthol. gr. j 0.06
Thymol. gr. vijss 0.45
Ung. Acid. Boracis q.s. ad oz. j 30. M.
Sig.: Apply in small amounts, rub in gently, wipe dry with cotton and add a little plain talcum.

(4) ℞ Phenol gr. x 0.6
Menthol. gr. j 0.06
Liquor. Carbonis Deterg. dr. j 3.75
Thymol. gr. vijss 0.45
Hydrarg. Ammoniat. gr. x 0.6
Naftalan. dr. jss 5.62
Petrolat. 30. M.
Lanolin. aa q.s. ad oz. j
Sig.: Apply sparingly, wipe dry and add a little talcum.

Whichever of these ointments is used, it should be applied before retiring and also as needed to relieve itching. It should be kept at the bedside for this purpose. If an ointment is used during the day, it should be applied in the morning (after washing [and immersing]), in the afternoon, and as needed. If one ointment seems to irritate, another may be substituted, and the phenol or the thymol, which are occasional irritants, may have to be removed temporarily. Plain zinc oxid ointment or boric acid ointment may be used at any time as soothing substitutes. If the ointment is rubbed in gently, wiped off with cotton and a little plain talcum added, the application may even be made over a fairly moist surface with satisfactory results.

Soon after the acute manifestations have subsided the potassium permanganate may be discontinued. Application of one of the soothing ointments, mentioned above, may be continued on the hands or about the sides of the feet or ankles, but the toes, nails and soles will require a stronger preparation if the fungi are to be destroyed. These organisms are found in the cellular layers of the epidermis and nails, and may extend deeply into callouses. Therefore the ointment must contain a keratolytic substance, and salicylic acid is preferred for this purpose. However, it must be remembered that salicylic acid is keratoplastic in a percentage of 2 or less, and keratolytic only when stronger than 2 per cent[5]. Therefore a strength of 3 per cent is generally advisable in a parasiticidal ointment, and greater strengths may be required for use on thickened or calloused patches or on the toenails. Thymol[6] is used to combat the growth of the fungi. In most cases ointments containing 5 per cent of thymol do not irritate the toes or soles. In order to prevent secondary bacterial infection ammoniated mercury is added in the strength of 2 per cent. From 1 to 2 per cent of phenol and one-fifth per cent of menthol are valuable ingredients for the relief and prevention of itching. Benzoinated lard is a good base for this oint-

ment, because it penetrates the epidermal layers and brings the thymol into contact with the organisms. The prescription, then, is as follows:

(5)	℞ Phenol.	gr. v-x	0.3-0.6	
	Menthol.	gr. j	0.06	
	Thymol.	gr. x-xxv	0.6-1.5	
	Hydrarg. Ammoniat.	gr. x	0.6	
	Acid. Salicylic	gr. xv	0.9	
	Adipis Benzoinat. q.s. ad	oz. j	30.	M.

Sig.: Apply sparingly, 3 times a day, to all toes (between and beneath), nails and entire soles; rub in, wipe dry and add a little plain talcum.

This ointment must be applied to every part of the surface in these areas, whether visibly involved or not, in order that all dormant fungi may be reached and destroyed. Irritation, especially of the dorsa of the toes, may follow these applications, and may be remedied by the temporary substitution of one of the soothing ointments already mentioned. When the irritation has disappeared the stronger ointment may be resumed. It may have to be used alternately with a soothing ointment. The toenails must be kept as short as possible, and a little absorbent cotton may be placed between the toes to promote ventilation and dryness. Discolored patches often appear temporarily on the nails due to the ammoniated mercury in the ointment[7]; they must not be confused with the more yellowish patches due to the infection. As a rule the ointment must be applied regularly for at least three or four months; it should be used for at least six or eight weeks after all visible evidences of the infection have vanished, to insure the destruction of any remaining dormant fungi. After this period has elapsed it seems advisable to apply the ointment nightly for perhaps two more months, in order to be on the safe side, and later a mild preventive ointment may be substituted for perennial nightly application to combat possible reinfection.

In occasional stubborn cases one of the newer liquid antiseptics may have to be applied night and morning, 10 minutes before the ointment, as a supplementary measure. Most patients prefer a non-staining antiseptic, and these are readily obtainable[8]. If irritation ensues, potassium permanganate, as recommended above, may be substituted. But it is important to remember that a persistent eczematoid eruption may not be caused by surviving fungi; it may be due to chemical irritation of the skin as a result of too energetic treatment. The use of the mildest ointments is then in order, and the skin may rapidly return to normal.

In cases presenting milder or dry eruptions when first seen, the preliminary moist dressings or immersions may usually be omitted and the ointments applied regularly from the start. If there are thickened patches on the palms the last prescription (number 5) may be useful in those areas. Of course the applications must be suited to the needs in each case, but the procedures outlined above are generally sufficient. In occasional instances the additional use of fractional roentgen ray treatments is helpful in hastening a clinical cure. But the rays do not directly destroy the fungi, and they are of service only in the hands of especially trained physicians for the relief of eczematoid manifestations. Generally cures may be effected without their use. Attempts at immunization by means of injections of fungus extracts are not advisable at the present time. Even after a long and tedious series of injections the end-result often proves disappointing; recurrences are common. Thus far more satisfactory results have been obtained by the local treatment already outlined.

If treatment of these fungus infections is to be successful, all contributing and aggravating factors must be controlled in every case. If there is hyperidrosis, an astringent solution (25 per cent solution of aluminium chlorid or 2 per cent formalin) should be applied to the soles (and sometimes also to the palms) night and morning, 10 minutes before the ointment. Of course, the astringent is stopped when the skin becomes dry, and resumed when the first trace of dampness reappears. The hose should be light, and during the warmer seasons perforated shoes are very beneficial[9]. Outdoor swimming should be encouraged, for it serves to keep the feet cool and well ventilated, and the abrasive action of sand between the toes facilitates the shedding of infected epidermal layers.

Flat feet and other deformities should be corrected, and shoes must fit properly, allowing the toes plenty of room. Constricting garters ought not to be worn, and varicose veins should receive attention. Eruptions on the hands will be more easily controlled if the patient's occupation (or housework) does not bring him in contact with irritants (eg., turpentine, cutting fluids, plating solutions, strong soaps, water softeners, etc). Rubber gloves, however, should never be worn over an eruption; usually they aggravate it. If irritants must be handled, the forearms and hands should be washed immediately afterwards and the ointment applied.

The general health should receive attention, and one should always be on the lookout for diabetes. Foci of infection should be removed.

PREVENTION

After the cure is apparently completed, measures must be adopted to prevent reinfection. It has been recommended that the hose be boiled and the shoes disinfected, but if the fungicidal ointment has been applied to the feet three times daily for three or four months it would seem most unlikely that viable fungi would remain in the footwear. Therefore the hose need not be

boiled. If desired, the shoes may be placed for 24 hours in a covered box with a small dish containing formalin. Following this, however, they must be aired for at least another 24 hours in order to prevent irritation of the skin by the formalin. If a mild preventive ointment is used every night, this formalin fumigation is unnecessary. Such an ointment is the following:

(6) ℞ Thymol. gr. x 0.6
Ung. Acid. Boracis
q.s. ad oz. j 30.

Sig.: Apply sparingly at bedtime to all toes, nails and entire soles; wipe dry and add a little plain talcum.

This ointment should eliminate any surface infection (from contact with shoes, floors, shower baths and swimming pools, etc.) which may have occurred during the day. I feel that it is more reliable than the prophylactic foot-bath. Patients who have continued its use have generally remained free from recurrences. Otherwise recurrences are common.

Finally it is essential that the hygiene of the feet be kept up to par. Hyperidrosis should be checked constantly (and it may point to thyroid abnormalities). The footwear should keep the feet dry and cool and not crowd the toes together. Perforated shoes should be worn during the warmer seasons.

SUMMARY

1. Ringworm of the feet can be cured as a rule, although several months of conscientious treatment are required.

2. The nature of the infection and its commoner manifestations are outlined, together with aggravating factors which are often encountered.

3. A scheme of treatment is described, with prescriptions and suggested variations to suit different cases. Main reliance is placed upon potassium permanganate, thymol and salicylic acid.

4. The possibility of chemical irritation from treatment is mentioned, and soothing substitutes are suggested.

5. The need for prolonged treatment after clinical "cure" is stressed, in order to eliminate all residual infection.

6. The importance of attending to contributory details, such as hyperidrosis, varicose veins, foot deformities and footwear, is emphasized. Perforated shoes are recommended for summer use.

7. Means for preventing reinfection are discussed, and a mild prophylactic ointment is suggested for constant nightly application.

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Pruritus: A Suggestion

The subject of pruritus, especially perianal, always has been an unhappy one, because the medical profession has been able to do so little for it except when a very specific cause could be found, such as the types definitely caused by fungus. Everything in the book has been recommended as a cure. Once in a while we find X-ray treatment of value, but more often not.

Because we noted, some years ago, that the patients who were urged to wash the parts thoroughly with soap and water after a bowel movement were improved or cured, a superficial irritation of the skin was thought to be the cause; and for this reason, having had such success in the treatment of burns and ulcers on other parts of the skin with the use of 1 per cent watery solution of gentian violet painted on and thoroughly dried, we tried it in the treatment of pruritus.

The parts are thoroughly cleaned and dried, the gentian solution is then painted on and thoroughly dried at the time with our connection with compressed air. Fanning probably would do as well. This should be used every day for a while then three times a week if necessary. It will be found that there is a decided improvement, if the method is properly used as above described.

We offer this for trial by the profession because we have had such a signal success in a few cases.—Alanson Weeks, M.D., and G. D. Delprat, M.D., San Francisco; California and Western Medicine. Vol. 47, No. 6; December, 1937.

Emotions exert a magnetic influence upon thought. Logic is, therefore, attracted towards the emotional pole. Thus it is that one always can find "good reasons to support one's prejudices".—Fetterman.

CYSTIC DISEASE OF THE LUNG

By WM. H. MADDOX, M.D., Wauseon, Ohio

IN AMERICA the first case of cystic disease of the lungs was reported by Koontz of Baltimore in 1925, who also discussed 108 cases gathered from the European literature. Since that time reports of cases have been made with increasing frequency. It is classed as a rare disease but undoubtedly occurs much more often than is supposed.

It consists of cavities in the lungs filled with fluid or air and with or without communication with a bronchus. With few exceptions it is referred to as congenital. Tuberculous cavities are not included in this classification. Bronchiectasis in the usual cylindrical or saccular form at the bases of the lungs is also not included. But cavities in other portions of the lungs called bronchiectasis by some are called cysts by others. Anspach and Wolman[2] propose a classification of congenital cysts based on their form and on their behavior after birth:

1. Solitary fluid cyst
   a. With no bronchial communication
   b. With bronchial communication either (1) free or (2) valvular.

2. Multiple fluid (or air) cysts which may or may not communicate with a bronchus; may be of the balloon type.

Pierce and Dirkse[29] propose a classification based on clinical, pathological and morphological grounds as follows: I. True congenital cysts. II. a. Chronic interstitial pneumonitis with emphysema. b. Chronic bullous emphysema. III. Cystic bronchiectasis. IV. Pulmonary pneumatocele.

Future writers may find a still more useful classification.

Without further discussion at this point cases of congenital cyst and pneumatocele will be presented.

CASE REPORT

Congenital cyst is typified by the case reported by Anspach and Wolman[2]:

A white male premature infant weighing 3 lbs. 6 oz. developed normally for seven weeks when respiration became rapid and cough developed. Temperature normal. Chest findings were attributed to atelectatic right lung. Two weeks later dullness and absence of breath sounds were present on the right side of the chest. X-ray showed a dense shadow obliterating completely the lower half of the right lung field. Above this lay a dome-shaped pocket of free air which had as its lower border a horizontal fluid level. Above this air pocket lay normal, air containing lung tissue.

From the Roentgenological department of the Detwiler Memorial Hospital, Wauseon, Ohio. Read at the Staff meeting December 9, 1937.

The Author

Dr. Maddox is a graduate of Ohio State University College of Medicine, 1898; member Radiological Society of North America; Diplomate, American Board of Radiology; roentgenologist, Detwiler Memorial Hospital, Wauseon.

There were frequent attacks of difficult breathing with cough and slight cyanosis. He coughed up some viscous, mucoid fluid on one occasion. Another x-ray examination four days later showed complete disappearance of the density from the right lung field. In its place was a large air containing cavity. This cavity gradually increased in size pressing the mediastinal structures to the left and the diaphragm downward. Death occurred at 11 weeks. At autopsy a cyst-like cavity was found in the middle lobe containing air under pressure. In the neighborhood of the middle lobe bronchus a small patent bronchiole lay within the cyst. Through this bronchiole air could enter the cyst but could not leave it because of a valve like mechanism in the bronchiole, probably from pressure.

I have related this case in detail because it is clearly congenital and also describes the valve-like mechanism because of which air cannot leave the cyst, which becomes progressively larger. Croswell and King[4] describe such a case in which air was aspirated from the cyst. A one way valve mechanism with a tube into the cyst cavity permitted aspiration of air every four to six hours. Finally lipiodol was injected and the child of three years developed fever then improved and apparently made complete recovery. This child had had numerous infections of the lungs and while called congenital by the authors, this is not proved.

Dr. C. B. Pierce[29] of Ann Arbor reports a case in a girl of four years in which a cyst developed in a previously normal lung as shown by a radiograph. The cyst followed an acute bronchopneumonia and manifested all the characteristics of the so-called congenital cyst. He shows a normal chest, then confluent lobular pneumonia, then an air filled cyst, with final complete recovery. This proves that a congenital basis is not a prerequisite for the development of lung cyst.

Rigler[31] of Minneapolis reports a similar case but without a film showing a previously normal lung. This patient, an adult male, had a staphylococcic pneumonia or lung abscess. He recovered, but the cyst evidently had a communication

with a bronchus which was not sufficient for free drainage and remained as an air containing cyst several years later.

Congenital cysts do not always take this form. Wolman[42] reports an autopsy on a six months fetus in which the right lung contained numerous small cysts from 1 cm. in diameter down to those too small to be seen without a hand lens. These cysts communicated with each other but had no communication with a bronchus and were filled with a clear, colorless, watery fluid.

Schenck[33] reports a case of a child who began to have dyspnoea and cyanosis on the fifth day and died at two months. The x-ray film showed evidence of atelectasis in the middle of the right lung field. Autopsy disclosed the lower portion of the upper right lobe filled with numerous intercommunicating cysts from one to two mm. in diameter and filled with grayish-yellow purulent material which contained streptococcus anhaemolyticus. It would seem that infection must have occurred after birth. There was no evidence of communication with a bronchus.

Arrested development may occur anywhere from the corina to the alveolus. Thirty-five cases have been reported in which one lung was entirely absent[16]. In some there was no indication of tracheal division, the remaining bronchus being simply a continuation of the trachea. In others a bronchus about 2 cm. in length ended in a small body of tissue which represented the undeveloped lung. Entire lobes are sometimes absent with a rudimentary bronchus. Arrest may take place at any point and cysts may be present beginning at the point of arrest.

Acquired cysts may take the form of a solitary cyst like those of Pierce and of Rigler; or may be of the multiple type and may be discrete or crowded so closely together that the term "honeycomb lung" is applied to them. The cyst walls show the same variations in both varieties.

The cyst wall is composed of a basement membrane which may or may not contain cartilage plates and muscle fibers. Those with cartilage plates are clearly of bronchial origin. Muscle fibres are found as far as the ductuli alveolares where they form a sphincter around the opening into the atria[24]. Absence of cartilage plates and muscle fibers in the cyst wall would appear to indicate that the bronchus does not participate in the formation of the cyst wall.

The walls of the cyst may be lined with ciliated columnar epithelium—the same as the bronchi—with cuboid or with flattened epithelium, or have no epithelial lining, as in a case reported by Gammon and Mallory.[11] Absence of epithelial lining may be due to the very rapid expansion of the cyst or to destruction by infection or chemicals.[39]

The contents of the cyst may be air or fluid. The presence of air predicates a communication with a bronchiole although this may not always be demonstrable. The expansile or balloon type always has a one way valve-like connection with a bronchiole. They occur only in children. Fluid may be clear or brownish mucoid secretion presumably from bronchial glands. In infected cases the contents may be purulent.

The causative factor in acquired cysts is always infection. Pierce[29] says: "Frequency of lobular or broncho-pneumonia in infancy and childhood, as well as the lobular character of aspiration pneumonia, is common knowledge. Necrosis of the bronchial or bronchiolar wall, associated with abscesses in these structures, is of relatively frequent occurrence—(20 per cent of cases autopsied—McNeil et al). Rupture of

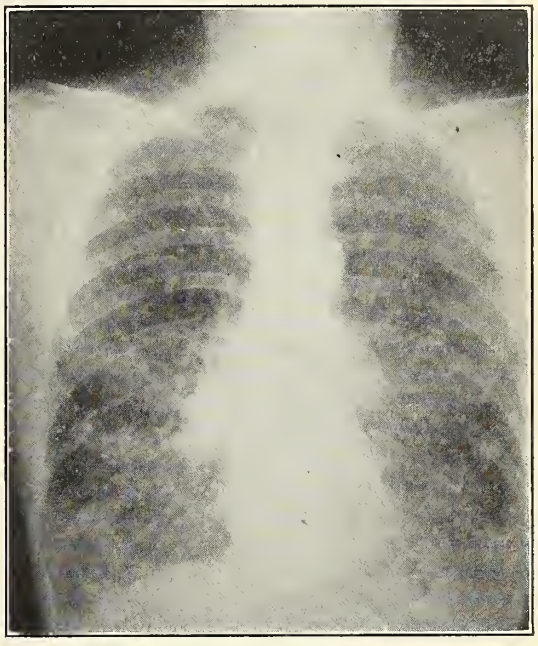


Fig. 1. Case 1. Multiple cysts throughout both lungs, of various sizes, some filled with fluid. Emphysematous blebs.

alveolar or bronchial walls with the production of an interstitial emphysema may occur, affording opportunity for air to dissect along the septa during cough, with the formation of sub-pleural blebs".

Wm. Snow Miller[24] says that openings between the contiguous alveoli may occur when the epithelium is destroyed on both sides of the interalveolar wall, but not otherwise. Assuming that as a result of pneumonia, either lobular or lobar, or lung abscess, communication is established between many alveoli; and that the bronchiole be narrowed by swelling of its mucous membrane or by mucous discharge so that the air may enter during inspiration but be trapped during expiration, the conditions for the development of a cyst are met. This may be large and solitary as in Pierce's case, or smaller and multiple, or very small and of the honeycomb type. Acquired cysts

are usually filled with air. Fluid means infection and usually inadequate drainage.

Clinical symptoms in the congenital cases may be absent; may consist only of a failure of growth; or may be intermittent dyspnoea and cyanosis; or severe cyanosis, dyspnoea and death. The severe symptoms usually occur in the balloon type. Sometimes the patient is without symptoms until infection occurs when the symptom complex of broncho-pneumonia is present, frequently followed by chronic cough and asthmatic symptoms.

Physical signs vary from none to dullness in fluid-filled cysts and displacement of the heart and mediastinum if the cyst is large. In case of large air-filled cyst the signs are those of pneumothorax with sometimes mediastinal displacement.

The clinical course depends on the size of the cyst, whether or not it is of the balloon type and on the repetition of infection. In the adult the course is that of bronchiectasis with emphysema.

Diagnosis is based on the above described symptoms and signs and on x-ray examination.

In the x-ray film we find in the larges tolitary fluid-filled cysts an area of density with definite



Fig. 2. Case 2. Postero-anterior view. Bronchiectatic cysts of left lung, filled with lipiodol.

margins which may be anywhere in the lung fields. In the air-filled cysts the density is that of air, the margin is frequently indefinite when the wall is too thin to show a line. The cyst may extend to the axillary line in which case it has been mistaken for pneumothorax. However the shadow of the lung collapsed near the hilum is absent. A small amount of air injected into the pleural cavity will differentiate. Large air-filled cysts are frequently crossed by long curved lines which mark septa within the cyst.

The multiple fluid-filled cyst will show as increased density as in Schenck's case. The multiple air-filled cysts present many pictures. If no inflammation is present the margins of the cavities are sharp, frequently circular, but distorted by pressure of adjacent cysts in the honeycomb type.

Cystic disease must be differentiated from dermoid cyst, echinococcus cyst, cystic areas in bronchogenic carcinoma, the rare fibroma of the lung; from eventration of the diaphragm and diaphragmatic hernia; from pneumothorax either general or localized; from cysts and tumors of the pleura[10a]; from chondroma and neurofibroma; from encapsulated empyema as well as from tuberculous cavities and bronchiectasis. When there is much inflammation pneumonia and lung abscess cannot always be differentiated[20].

CASE REPORTS

Case 1. R. C. H., a white male aged 42, was referred for examination of the chest on March 22, 1937, by Dr. L. E. Botts, who has kindly furnished the clinical notes. He is a farmer. Father living—has ulcers of the stomach. Mother living, has some stomach trouble. One brother and three sisters living and well. Two brothers dead, one of typhoid the other in infancy. No tuberculosis in the family.

The patient has had pneumonia five or six times and scarlet fever in 1913. Sinus trouble for the past 10 years. Appendectomy in 1913; uvula clipped in 1925. The present trouble began in 1913 when he was 18 years old, with asthmatic attacks which gradually grew worse until he had to give up work in 1924, eleven years later. He now has dyspnoea, cough, abundant morning expectoration, fatigue; color sallow, anemic, skin dry and hair coarse.

The film shows many cysts, some of honeycomb type—small and with walls indented by adjacent cysts—some larger and spherical, some with very fine circular lines at the margin, and some filled with fluid. There is much inflammatory infiltration around the cysts.

The question of etiology arises. This trouble began when the patient was 18 years of age, and had had pneumonia. The dates of the five or six pneumonias are not given but presumably some were before the onset as was the scarlet fever. Some writers think that there is a congenital weakness of the bronchial walls or of the elastic tissue in all cases of emphysema and bronchiectasis. We have no way of determining this factor. But it would appear in this case that it cannot rationally be considered congenital cystic disease, but was acquired in the way so well described by Pierce, by breaking down of alveolar and bronchiolar walls by infection and distention of the cavities thus formed by the chronic cough and asthma with its attendant obstruction to expiration.

Case 2. A. S., a white married female aged 57, was referred on July 12, 1937, by Dr. R. E. Merrill to whom I am indebted for the clinical notes. She has had chronic cough nearly all her life. Two years ago (Aug., 1935) she was sent to the Lucas County Hospital with a diagnosis of pneumonia. She was in bed four weeks, but never acutely ill. Since then cough has been worse with foul sputum at times but never in large amounts. She had hemoptysis first two years ago, and again four months ago began having small intermittent hemorrhages which

have persisted to date (Aug., 1937). She has frequent head colds and is very nervous and apprehensive. The chest examination shows limited expansion on the left side. The lower chest is dull to flat on percussion with absence of breath sounds. There are clicking coarse rales in the upper half. The heart is displaced to the left. Kline negative. Sputum has been and is now negative for tubercle bacilli and fungus. Paracentesis was done 7/14/37 and 7/20/37 with no fluid. Patient is a diabetic.

The film shows a narrowed left chest with heart and trachea drawn over to the left. In the costo-phrenic angle there is greatly increased density, thought to be fluid, but none was found. This is probably atelectasis. In the upper half



Fig. 3. Case 2. Lateral view.

of the chest there are a number of areas of lessened density in the midst of the general increased density.

Instillation of lipiodol shows a number of fairly large cavities.

The pathogenesis of this case is very interesting. Following the low grade pneumonia two years ago there developed a chronic diffuse interstitial fibrosis with emphysematous or bronchiectatic cavities. The nomenclature of this type of cavity is by no means uniform. By some they are called congenital cysts; by others acquired cysts, bronchiectatic cavities or emphysematous cavities. There are numerous reports on this type of cavitation. It is hoped that general agreement may be had on the terminology.

SUMMARY AND CONCLUSIONS

1. Cystic disease of the lung may be congenital or acquired.

2. Acquired cysts are always the result of infection.

3. General discussion of symptoms, pathology, and diagnosis.

4. Two cases of acquired cysts are presented.

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DELIVERY THROUGH THE RECTUM OF AN EXTRA-UTERINE FETUS

By CLAYTON C. PERRY, M.D. and J. SALTZMAN, M.D., CLEVELAND, OHIO

IN reviewing recent literature, we find only a few reports of cases of delivery through the rectum. H. Yussuf,[1] in November, 1933, reported a case in which the fetus was 9 cm. long. In 1929 Binaghi and Bardi[2] reported the spontaneous rupture of hematocele into the rectum. In June, 1937, in the British Medical Journal, J. B. Patel,[3] Honorary Chief Medical Officer of the Hindu Maternity Home, Navsari, Bombay, India, reported a case of the spontaneous birth of a living child through the rectum. The child died immediately. It was the patient's second confinement, and it seemed that the first delivery must have taken place through the rectum also. In the British Medical Journal for July 31, 1937, there is a letter from P. G. Preston[4] from the Kenya Colony in which he describes the case of a young Kiluyu woman who had given birth to a stillborn child through the rectum. Gould and Pyle,[5] in their book on Anomalies and Curiosities of Medicine, state that the discharge of fetal bones or even the whole of an extra-uterine fetus by the rectum is not uncommon, but they do not cite cases.

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REPORT OF CASE

The patient, a white American housewife, aged 35 years, was brought to Saint Alexis Hospital in an ambulance on May 8, 1934, complaining of nausea, vomiting, profuse rectal bleeding, and incontinence of urine and feces.

She had been in good health, except for the slight nausea of pregnancy, until one week before admission to the hospital when she first noticed slight bleeding at stool. The blood was bright red. Within a few days the bleeding was profuse and contained many clots. During the 24 hours before admission to the hospital she had had numerous severe hemorrhages. She had had urinary and fecal incontinence and a desire to go to stool for one week. The incontinence had begun about the time she first noticed the blood in the stool.

The family history was essentially negative. The past history was also essentially negative except for the usual childhood diseases and acute rheumatic fever. There was no history of injuries or surgical operations.

The menstrual periods had begun when she was 16 years old and had been regular every 28 days, the flow being scanty and of three days' duration. There was no history of former pregnancies, miscarriages, or abortions, or of the use of contraceptives. The last period had been November 11, 1933. Her family physician had seen her only once prior to hospitalization.

The patient was extremely pale, emaciated, and restless and had the appearance of one very ill. The buccal mucous membranes were pale; the tongue was pale and coated. The temperature was 98 degrees Fahrenheit; pulse 124, volume not good. Respirations were 26 per minute, and the blood pressure was 120 systolic, 80 diastolic.

The examination of the heart and lungs was comparatively negative. The abdomen was enlarged, and a large tumor mass was palpated. This tumor extended from the pubis to the umbilicus and was movable; some tenderness was elicited on deep palpation. There was no evidence of fetal movement or fetal heart-beat. There was marked edema of the right lower leg and of both ankles. A vaginal examination was not done at this time.

Digital examination of the rectum revealed a large, somewhat flat mass bulging into the rectum about five centimeters above the anal canal. This mass was movable but adherent and felt like some type of foreign body or a hard, flat piece of dried feces. Further examination showed this mass to be attached to the anterior rectal wall.

Proctoscopic examination: After the proctoscope was inserted and the obturator was removed, considerably bloody fluid was removed which had the odor of amiotic fluid. The elongated mass was found to be pale in color, covered with short hairs, and it could be seen protruding through the anterior rectal wall. A tentative diagnosis of ectopic pregnancy rupturing into the rectum or of a presacral dermoid was made. However, we were quite positive that we were dealing with a dead fetus, the macerated head of which presented itself in the rectum.

Intravenous glucose was given to the patient immediately, and on May 9th a transfusion of 500 cubic centimeters of whole blood.

Cultures of the bloody fluid sent to the laboratory revealed no placental tissue. The blood cell count was 3,340,000; white blood cell count, 19,600; hemoglobin, 50 per cent; polymorphonuclear count, 78 per cent. A catheterized specimen of urine, 200 cubic centimeters, showed two plus albumin, many red blood cells and white blood cell clumps. The blood Wassermann examination was negative.

As a matter of interest and as an aid in diag-

Submitted January 4, 1938.



Fig. 1.—Roentgenogram showing fetus in pelvis. The skull is not definitely visualized. There are irregular areas of density in region where skull should have been. The rest of the developed bones are fairly well visualized.

nosis, roentgenograms of the abdomen were taken and showed the presence of a fetus in the pelvis, Fig. 1. The skull of the fetus was not definitely visualized. There were irregular areas of density in the region where the skull should have been. The rest of the developed bones of the fetus were fairly well visualized.

On May 10, 1934, the patient was sent to the surgery, although she was very weak and the pulse rate was 130 per minute. Ether anesthesia was used; the patient was placed in the lithotomy position and careful preparation with methiolate was carried out. After careful examination, it was plain that the operative procedure should consist only of delivering the fetus in the shortest time possible with the least amount of trauma to the patient. The sphincter ani muscles were divulsed sufficiently to admit the hand into the rectum. With the aid of retractors, the macerated head could be seen protruding into the rectum through the anterior rectal wall. Traction was then applied to the remains of the fetal head so that a better hold on the neck could be obtained. By steady traction the posterior arm was brought into the rectum. In trying to deliver the anterior arm, the neck was torn in two pieces, leaving the shoulders and upper thorax for traction. By working with these parts the entire fetus was delivered and the secundinae were removed to a large extent by means of placental forceps and a large spoon. The interior of the cavity from which the fetus was delivered was swabbed with Churchill's iodine and packed with a large iodoform gauze drain. After delivery the cervix of the uterus was found to be of the virginal type, and the position was left anterior.

The patient left the operating room in a very poor condition; the pulse rate was 152 and it was very weak. There is no record of the blood pressure at this time. Immediately after she was returned to her room, 250 cubic centimeters of 10 per cent glucose was given to her and morphine in sufficient doses to keep her comfortable and quiet, and piuitrin and ergot every six hours. That evening 50 cubic centimeters of 10 per cent glucose was given. At this time there was considerable bleeding from the rectum and a slight amount from the vagina; the fundus of the uterus was firm. At 11:30 that evening the patient had a chill lasting 10 minutes, and following this her temperature was 102 degrees Fahrenheit, and pulse rate 128. She was perspiring profusely, and a catheterized specimen of urine was very dark. There was beginning edema of both feet and ankles.

On removal of the gauze pack three days after delivery, examination disclosed a circular opening, 4 cm. in diameter, in the anterior wall of the rectum, the edge of which was smooth, firm and little less than 1 cm. in thickness throughout its circumference. The sensation to the examining finger was that of a normal cervix undergoing dilatation previous to delivery.

The convalescence was very stormy for about 12 days. There was marked edema of both feet and legs, and there was purplish discoloration of the feet and ankles. The edema extended as far as the gluteal region. The temperature ranged from normal on the day of admission to 103 and 104 degrees Fahrenheit. The pulse rate increased until the seventh day when a peak of 156 was reached; after that time there was a gradual decline until the twentieth day. For the first postoperative week there was a fairly constant sanguineous, foul-smelling rectal discharge, and a very slight amount of vaginal bleeding. The first stool free from blood was passed on the eighth day.

The patient was dismissed from the hospital on May 28, in improved condition but very weak. The edema and the reddish discoloration of the feet and ankles had disappeared. There was still a slight amount of vaginal discharge, but free from blood, and the rectal bleeding had entirely ceased.

It was evident from the patient's history and the measurements and weight of the fetus that this was about a five months' fetus. The length of the fetus was 26 centimeters; chest measurement, 17.7 centimeters; circumference of the skull, 12 centimeters; and the weight was 3.75 pounds or 1710 grams. This weight would seem excessive for a five months' fetus, but it may

have been due to pathologic change in connection with its death.

On August 15, 1934, three months after the operation, the patient was examined and was found to have a normal virginal cervix. The uterus was to the right and fixed with a first degree retroversion. There was some thickening of the right side of the pelvis, undoubtedly the site of the extra-uterine pregnancy. Rectal examination showed an intact rectal mucosa at the site of perforation with a slight amount of scarring.

The patient was examined on May 6, 1935. A sigmoidoscopic examination of the rectum was normal except for a slight puckering of the rectal mucosa on the anterior wall just below the rectosigmoid junction. The uterus was normal and free. The cervix pointed backwards and was very small, more like a dimple. There was no evidence of lacerations of the cervix and the cervix was typically virginal.

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Poliomyelitis

It is evident that much of the recent work on poliomyelitis has been destructive rather than constructive in nature—perhaps a healthy sign. At any rate at the present time, we must face the fact that the prospects of solution of the many puzzling problems of this mysterious disease in the immediate future are not bright. Until such a time as the epidemiology is thoroughly understood and until a simple method of determining the susceptibility to the disease has been found and definite specific prophylactic and therapeutic means for combating the disease have been discovered, it would seem that the lay public is entitled to share with us the realization of our profound ignorance of most of the essential facts of the disease. The premature publication of half truths has for years kept the public in a state bordering on hysteria and has thrown a tremendous and increasing onus on the practicing physician.—John Fitch Landon, M.D., New York City; New York State Jour. of Med., Vol. 38, No. 1; January, 1938.

Prostitution

Highly appreciating all the efforts to diminish this social evil by religion and moral teaching, but also realizing that enforced legal segregation, monthly and even weekly, compulsory examinations have not diminished venereal diseases, what are we to do? The evidence of the futility of all regulations and inspections is best shown by the fact that in certain European cities where such preventive measures exist, there are the largest clinics for the treatment of syphilis and gonorrhea. Since repressive measures, although strongly favored by General Parran, are seemingly of relatively little avail, perhaps a more humane and sympathetic attitude may be helpful. Women rarely enter the ranks of prostitution voluntarily. Economic pressure plays an important rôle. Married women deserted by their husbands, girls seduced by their lovers under promise of marriage and then abandoned, and last but not least, the innocent victims of the nefarious white slave traffic, constitute the bulk of the army of those unfortunate women. No measures can be too severe to stop the horrible and inhumane white slave traffic. Prostitution, however, will probably continue to exist until there will be a decided change in our socioeconomic status, enabling earlier marriages, providing eugenic guidance to married people to assure only the best physical, mental, and moral progenity. Elimination of the socially unfit by humane but effective sterilization, must be concomitant with these improvements. Moral and religious teaching and sex education should be encouraged. The danger of venereal diseases contracted by promiscuous intercourse, the importance of every one doing his share to diminish this shadow on the land and the enormity of the plague which must go and forever leave our shores must, of course, be tactfully but fearlessly taught in public gatherings and in our schools and colleges.

The reports of Surgeon General Parran and Dr. M. Fishbein, who studied the antivenereal warfare in Scandinavian countries at first hand, inform us that a vigorous general medical campaign, popular education and repressive measures proved successful in reducing venereal diseases to a minimum (mainly syphilis but not yet gonorrhea). With us, a country many times the size of Scandinavia, with a heterogeneous population of different races, different ethnic origin, different religions, etc., we simply cannot, for the time being, obtain such results. All we can do is to create with the Government and medical profession united, more clinics, more hospitals, and designate enough physicians to do the diagnostic and curative work, and last but not least, be helpful financially to such societies as the moral hygiene societies, antisyphilis committees which work for popular education, etc.—S. Adolphus Knopf, M.D., New York; Medical Record, Vol. 147, No. 1; January, 1938.

DIABETIC SURGERY

By RALPH E. PICKETT, M.D., NEWARK, OHIO

APPROXIMATELY 30 per cent of all diabetics become surgical problems and yet, as a group, diabetic cases often suffer from actual surgical neglect. The introduction of insulin has so revolutionized our treatment that no conscientious surgeon can dodge his new responsibility. Not only must there be a close cooperation between physician and surgeon, but time and effort must be given to minute details.

The surgeon is confronted by two outstanding problems. First he must determine whether the surgical case has diabetes and second he must decide whether the diabetic case has a surgical condition. The latter problem becomes extremely difficult in the presence of diabetic acidosis.

Needless to say, no patient should go to operation without urinalysis. Frequently small amounts of sugar are found in the urine of patients without known diabetes. The finding of sugar in the urine always should be regarded as evidence of diabetes until the absence of diabetes is proved. There are other well known factors which give positive tests for sugar in the urine other than true diabetes and these must be ruled out. On the other hand mild cases may show no sugar before operations and yet pass quickly into severe coma. Therefore a very careful history is absolutely essential. The following criteria have been adapted by Dr. Joslin for cases referred because of glycosuria:

(a) The diagnosis of diabetes must be made in the presence of considerable sugar in the urine and a blood sugar exceeding 0.14 per cent fasting or 0.17 per cent after a meal.

(b) Potential diabetes is considered to be present when the urine contains amounts of sugar varying from 0.5 to 1 per cent at different times and the blood sugar, normal when fasting, does not exceed 0.16 per cent after a meal containing 50 to 100 grams carbohydrate. The urine becomes sugar free with slight restriction of diet.

(c) The diagnosis of renal glycosuria rests upon: (1) the presence of sugar in the urine at all times, regardless of diet, (2) a normal blood sugar at all times with slight variations with the diet, (3) the development of acidosis if subjected to vigorously restricted diet, (4) the absence of diabetic symptoms, (5) duration over a period of years. It must be kept in mind that a potential case may become a severe and permanent case following operation.

The diagnosis of a surgical condition is extremely difficult in the presence of acidosis before actual coma sets in. Acidosis usually has a gradual onset with headache, weakness, cramps, vomiting, and constipation. There may be abdominal pain either steady or colicky in type. Pain may occur anywhere and may simulate any surgical condition. When uncomplicated the temperature is usually subnormal and the pulse rapid. The blood pressure usually falls as the acidosis develops. This aids in confusing the picture with that of coronary pathology. The skin and mouth may be dry and the extremities cold. The eyeballs may be softened and the cheeks flushed. There may be an acetone odor to the breath. The most important diagnostic sign, however, is that of air hunger with a Kussmaul type of breathing. This does not appear until acidosis is well advanced. Fever is not a symptom of diabetic coma and when present there is usually a complication. Besides differentiating surgical conditions one must rule out acute infection, meningitis, encephalitis, uremia, cerebral hemorrhage, narcotic poisoning, concussion of the brain, and alkalosis.

In the preoperative consideration of the surgical diabetic, the surgeon must always think of coma and set up a defense against it. The diet is not the same as that used in the ordinary diabetic. The results are better if there is time for gradual adjustment. In arranging the diabetic diet the calories lost in carbohydrates are made up by additional fat and if the change is sudden there may be a digestive upset. The patient should be free of acidosis and glycosuria on a diet which provides at least 25 calories per kilogram body weight. This may be acomplished with or without the use of insulin. Liquids should be given generously before and after operation. The patient must not be fasted. Almost all diabetic patients need both food and fluid before operation.

Much could be written concerning the choice of an anesthetic for diabetic operations. Suffice it to say that both the choice and method of administration play an important role.

It is rarely necessary to give insulin during an operation. Subpectoral infusion should be given immediately after operation and body heat re-

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stored. Nourishment should be given as soon as possible, either by mouth, rectum, or intravenously. Glucose given intravenously is useful in cases of persistent vomiting or post-operative shock. During the first 24 hours following operation the insulin dosage should be guarded and given only after careful determinations of urine or preferably blood. The surgeon should keep in mind that morphine, pituitrin, and epinephrine inhibit the action of isulin.

Marked gains in glucose tolerance are observed post-operatively especially where gangrene or severe infection has been present before operation. The convalescent period in all cases should be used for treating the diabetes and improving the tolerance. Food should not be forced on the convalescent case. Under-feeding is better than over-feeding for the first week or two providing the patient receives the necessary amount of carbohydrates. Usually the amount of insulin is decreased during this period.

Gangrene is the most distinctive surgical complication in diabetes. Lesions of the extremities are not only common, but frequently cause loss of limb or death. The treatment of even small lesions are time consuming and require minute attention. They add a great responsibility to the surgeon. Early recognition and treatment is imperative. The surgeon is responsible for choosing the type of treatment, deciding when and where amputation should be done, and for the restoration of the patient, as nearly as possible, to his former economic and social position.

The lesion may be due to deficient circulation, infection, or a combination of the two. In examining the local lesion, one should notice whether it is demarcated or diffuse. One should determine whether the infection is localized in the form of an abscess or whether there is osteomyelitis present. McKitrick and Root state that as a rule the foot with localized pus or osteomyelitis in the absence of gangrene, is a foot with fairly satisfactory circulation, otherwise localization of the infection would not have taken place. The determination of the presence or absence of pulsation in the peripheral vessels is essential. The dorsalis pedis artery is clinically the most important of all the peripheral vessels. It is well to observe the state of nutrition of the extremity. One should also look for color changes and test the local temperature.

Uncomplicated gangrene in diabetic cases may be embolic in origin but is usually due to arteriosclerosis. Pain is undoubtedly the most important single symptom. It may be present as intermittent cramps, as a steady throbbing pain, or as a severe burning or stabbing pain. It is usually worse at night.

The indications for non-operative treatment are: (1) A demarcated or superficial area of gangrene. (2) Small lesion with palpable adjacent artery. (3) Small superficial lesion without palpable pulsation providing infection is slight, extremity warm, and color at least fair. (4) Failure to obtain first intention healing providing spreading infection is absent.

In non-operative treatment the infection should be treated by rest, elevation, and conservative application of cleansing and mildly antiseptic solutions. Gangrene sloughs may be removed by use of Dakin's solution and gentle traction. Circulation may be stimulated by Buerger's passive exercises but now more specifically by use of positive and negative pressure in Pavaex or other type of pump. This latter treatment has proved to be markedly successful in the hands of Herrmann, Reid, Landis, and others and probably will revolutionize our past methods of treatment. It will be impossible to give it full consideration in a paper of this scope.

The usual indications for operation are: (1) Gangrene of one or more digits. (2) Severe pain with or without local gangrene which has not improved under conservative treatment. (3) Deep or extensive infection. (4) Severe diabetic crisis. (5) Economic exhaustion.

It will be impossible in this paper to give much consideration to amputation and artificial limbs. There are, however, several important technical points applicable to all amputations. The skin flaps should be long enough so that muscles may be closed together over the bone ends without tension and yet short enough to prevent dead space. Provision should be made for post-operative swelling. No tourniquet should be used. Diabetics are dependent upon their collateral circulation. When there is extensive infection, however, it is well to use a tourniquet both above and below the incision. Trauma must be slight. Care must be taken to keep skin edges covered at all times. The periosteum should be cut with a knife and scraped distally. No bone fragments should be left. Nerves should be crushed, transfixed, and injected with absolute alcohol. Hemostasis should be complete but only a minimum of suture material should be left. Drainage should never be used unless the local infection is so extensive that guillotine amputation is done. Closure of the wound is extremely important. Careful approximation of the fascie is the most important single step. The skin edges should be carefully everted, there should be no tension and where possible the suture line should not be over the end of the stump. The dressing is also important and should be firm but not tight. The stump should be elevated for the first two or three days. Unless there is evidence of infection the dressing should not be removed for four to eight days.

The carbuncle ranks next to gangrene as a surgical complication of diabetes. The diagnosis is

easy to make. All diabetics with carbuncle should have hospital care. The surgeon and the patient must realize the seriousness of the condition. The diabetes must be properly treated, the lesion localized, and operation must be radical enough to relieve the condition and prevent spread. Drainage must be adequate. Minute attention must be given to post-operative details.

Surgical diabetes may manifest itself in various ways. The disturbance of carbohydrate mechanism may be due to pancreatic damage but insulin secretion may not necessarily be diminished. Factors opposing the action of insulin such as the imbalance of the pituitary, thyroid, and adrenal glands may cause the diabetes.

Great improvement of carbohydrate function follows thyroidectomy in hyperthyroidism. This is not true of non-toxic thyroid conditions and thyroidectomy seldom results in a permanent cure. Diabetes is a condition in which less than the normal amount of glucose can be oxidized in a unit of time. When the fat burned is more than four times the glucose burned, acidosis develops. If the diet does not supply the total calories the extra calories necessary for the metabolism are derived from the body fat. In hyperthyroidism, with its high metabolic rate, the total metabolism may be much greater than the ordinary diabetic patient. Consequently acidosis frequently results when the diabetic patient has hyperthyroidism and an insufficient number of calories are provided in the diet. The use of both insulin and iodine is necessary to prepare such a case for operation. One must always consider diabetic coma in cases of suspected trachial obstruction following operation in diabetes.

de Takáts and others have repeatedly demonstrated the existence of severe diabetes especially in juveniles which have shown marked improvement following splanchnic nerve section. These patients are first submitted to careful glucose tolerance tests using ergot, a sympathetic depressant, and insulin. When a diabetic does not respond to ergot nothing can be expected from splanchnic nerve section. Much research has been devoted to such procedures and others such as operation on pituitary, adrenal, cortex, etc. The results are not yet conclusive. The tail and body of the pancreas have also been ligated to encourage hyperplasia of the "Islets of Longerhans" with very little actual clinical benefit in humans.

I shall make no attempt to enumerate or consider the various surgical conditions associated with diabetes. McKittrick and Root have given us an excellent book covering the entire subject of diabetic surgery and the literature of the post-insulin area contains many interesting and enlightening case histories. It is my purpose in this paper merely to arouse interest in an unusually intriguing field.

CASE REPORT

In conclusion I would like to present a case history which illustrates the improvement in a diabetic condition due to pancreatic and gall-bladder pathology after removal of the infectious focus and decompression of the pancreas. It demonstrates to some degree the marked regenerative power of the pancreas.

Case History: The patient is a white male of 39 years who was first admitted to the hospital in July, 1933, for bilateral herniorrhaphy. There was no sugar in the urine at the time and no diabetic history either in the family or past histories. He made an apparently uneventful recovery and was discharged on his fourteenth post-operative day. He returned for a follow-up in the O.P.D. four weeks later and at that time he complained of severe upper abdominal pain, nausea, and vomiting. A diagnosis of acute cholycystitis was made and the patient was admitted and treated conservatively until his symptoms disappeared. Repeated urine examination revealed a moderate amount of sugar, there being about 1.0 gm. per 24 hour specimen. Before discharge he was given intravenous dye and cholecystograms revealed multiple stones. Cholecystectomy was advised but refused. He was followed in medical surgery O.P.D. and showed gradually increasing polydipsia, polyuria, and epigastric pain with nausea. He had two rather severe attacks of colicky pain over right upper quadrant. He was placed on a diet of C.80, P.70, F.135 and given soluble insulin, 10 units twice a day. His glycosuria became difficult to control and the increased fat in his diet made his surgical condition worse. The diet was changed several times and his insulin increased. Eleven months from the time of his first admission he was readmitted complaining of severe upper abdominal pain. There was marked tenderness over the epigastrium and a questionably palpable mass. Operation was performed and a pancreatic cyst was discovered. It contained about 200 cc. of dark reddish fluid. The cyst was marsupialized. The gall-bladder was drained and a large number of bilirubin stones removed. The gall-bladder wall was thickened and showed evidence of infection. The cyst fluid was sterile on culture. It was not examined for pancreatic ferments. The patient made an excellent recovery and was discharged on his 24th day with only a moderate amount of serous drainage. The sinus gradually filled in and closed completely in about three months. The patient looked and felt better and on a diet of C.80, P.65, and F.135 he became sugar free and no insulin was necessary. The carbohydrates were gradually increased to 130 and the fat decreased to 60. Blood sugar six months after operation was 0.14 per cent. The patient was advised that a cholecystectomy might have to be performed at a later date. Patient was in good health when last seen.

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Pneumonia

The road to the modern treatment of pneumonia patients in the home is not an easy one. Through the initiative of individuals or of county or state organizations, as witness the state projects in Massachusetts[1] and New York, much may be done to attain this objective. Facilities, if lacking, must be established in accessible, centrally located laboratories for rapid and accurate typing of Pneumococci. Specific sera must be rapidly and readily available. (It is provided gratis for physicians in many states). Suitable modern oxygen apparatus should be at hand or within reach. Portable x-ray machines will be of much value if available. Finally the help of competent nurses must be enlisted.

Blood cultures are of value prognostically (the mortality with positive cultures is six to eight times that with negative) and when sputum is unobtainable, diagnostically. Such cultures are not always easy to secure in the home but occasionally are indispensable. Should growth appear in the culture medium, type determination may be carried out by the agglutination or the Neufold methods.—Gerald S. Shibley, M.D., Cleveland, Ohio.

We should avoid the definite diagnosis of coronary disease unless we establish, first, the presence of angina pectoris without luetic aortitis or extensive aortic valve disease; secondly, the occurrence of coronary thrombosis past or present; or thirdly, the existence of bundle-branch or auriculoventricular block or of characteristic coronary T-wave changes in the electrocardiogram whose onset has been observed in young, middle-aged or elderly adults.—Paul D. White, M.D., Boston, Mass.; The New Eng. Jour. of Med.; Vol. 217, No. 20; November 11, 1937.

Further Proof of the Non-Passive-Expiration Theory to Explain Asthma

I review my former report on the subject and present one observation, not previously reported, to further substantiate the theory I presented in 1916 that the characteristics of asthma are caused by forceful exhalation if sufficiently persistent. It is of more than mere academic interest, I maintain, that long-continued, forceful exhalation if such were possible without organic pathology, could produce the syndrome of symptoms which we know as bronchial asthma. I also contend that no matter what the pathology, the typical symptoms of asthma cannot be produced without non-passive (forceful) expiration. Along with and as the usual cause of the forceful expiration are organic changes, ordinarily allergic, which certainly cause swelling of the bronchial mucosa and perhaps spasm of the bronchiolar muscle.

From these facts it is easy to see that dyspnea from heart or kidney disease, from over-exertion from coughing and sneezing and from any bronchial condition which causes dyspnea may help to cause asthma.

The observation made years ago which I have not reported was upon a man with a severe chronic bronchiectasis with extensive pneumonitis and considerable cavitation as later shown by the autopsy. I conceived the idea of draining his lungs by keeping him upon a bed with the foot considerably higher than the head. I made probably two mistakes: getting his feet too high and keeping him in that position too long. He developed asthma after being kept in that position two to three days. On being put in a horizontal position especially if the head were moderately raised the asthma promptly disappeared. The alternation of positions was made numerous times with similar results. The explanation is that the low position of the chest permitted too much blood to accumulate in the lungs and in the bronchial mucosa, and these led to undue over-filling of the bronchial mucosa with blood, dyspnea, cough and asthma. From these facts then it is plain that when asthmatics lower their heads and chests for the purpose of coughing the material from the bronchi downhill instead of up-hill they should remain but a few minutes at a time in that position.

In conclusion I repeat that it is necessary to understand the non-passive expiration theory to understand the physiology of asthma.—Orville Harry Brown, M.D., Phoenix, Arizona; Southwestern Medicine, Vol. XXI, No. 12; Dec., 1937.

RUPTURE OF THE CHORDAE TENDINEAE OF A NORMAL MITRAL VALVE: CASE REPORT

By R. W. KISSANE, M.D., and R. A. KOONS, M.D., Columbus, Ohio

VAQUEZ[1], quoted from the thesis of Dreyfus[2], that the frequency of rupture of the mitral apparatus was 22 times as against 45 times of the aortic valve, and that the chordae tendineae and papillary muscles rather than the valve cusps were most frequently ruptured when the mitral valve was involved. Invariably there was some predisposing pathology present in the valve but Frothingham and Hass[3], reported a case of rupture of the chordae tendineae of a normal mitral valve following exertion. The following case is reported because of the infrequency with which this type of injury to the heart has been noted.

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CASE REPORT:

J. B., a white male, 37 years of age, was sent for examination on June 13, 1929. The past history was that he had had scarlet fever in 1901, diphtheria in 1909, influenza in 1918 and an appendectomy in 1914. He had led an active life and had had a number of physical examinations, the last for an insurance policy was just a few months before his accident, and on every occasion the heart was pronounced normal. On February 11, 1929, he attempted to start a Ford truck which was cold and after cranking for about 30 minutes he became faint and dizzy and had an immediate severe pain in the left chest with severe dyspnea. This pain has persisted in a mild form but is aggravated by exercise, excitement or anger. There has been moderate dyspnea since the accident which becomes severe on exercise and he also has occasional attacks of dizziness and palpitation. An examination revealed a well nourished and well developed man with a healthy appearance. The apex beat of the heart was felt in the fifth and sixth interspaces 9 cm. to the left of the midsternal line. The cardiac dullness was in the fifth interspace 9 cm., the third interspace 4 cm. to the left and in the fourth interspace 4 cm. to the right of the midsternal line.

Auscultation revealed a low pitched vibrating murmur at the apex and along the left border of the sternum, which was not related to respirations but would occasionally disappear for a short period of a few seconds. The heart rhythm was regular with an occasional ventricular premature beat and the rate was 80. The liver was at the costal margin and the blood pressure was 120 mm. systolic and 70 mm. diastolic. The orthodiagram gave the transverse diameter of the heart as 12.9 cm. and the electrocardiogram was normal. The condition of the patient remained the same until on September 11, 1933, when he complained of having slight edema of the ankles, and that the attacks of dizziness were more frequent and severe. He began to tire very easily and shortly after this he developed tenderness of the liver, nausea, increased weakness, edema and dyspnea. He was given digitalis which resulted in the disappearance of these symptoms but repeated electrocardiograms and orthodiagrams did not show any change in the heart. Another examination in 1935 revealed the murmur as it was first heard and there was now a slight thrill felt over the apex. The electrocardiogram at this time revealed a change in the T waves in leads 1 and 2 which became negative. At an examination in 1937 the transverse diameter of the heart by orthodiagram had increased 3. cm. and there appeared an increase in the left auricular shadow posteriorly. Clinically there were signs and symptoms of increasing myocardial insufficiency. The diagnosis was rupture of the chordae tendineae of a normal mitral valve.

DISCUSSION

The low pitched vibrating murmur which was heard at the apex and along the left border of the sternum resembled very closely the sound of the jews-harp and is produced by the vibrations of the free ends of the chordae tendineae in the blood stream. The disappearance of the murmur occasionally for a few heart beats was thought to be due to the loose fragment becoming adhered to the ventricular wall as was also observed by Vaquez[1].

Because of the negative examination in 1928 it is reasonably safe to assume that this man had a normal heart at the time of the severe strain, which evidently caused rupture of the chordae tendineae. In the case of Forthingham and Hass[3], strain was also the causative factor but the chief symptom was dyspnea and did not appear immediately, while in this case the chief and immediate symptom was pain in the left

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chest acompanied by severe dyspnea. The diagnosis depends upon a previous knowledge of the condition of the mitral valve, the almost immediate occurrence of substernal or left chest pain and severe dyspnea, and the presence of the low-pitched, vibrating, jews-harp type of murmur which is systolic in time.

It appears that myocardial failure follows injury to the mitral valve in a comparatively short time, but in the reported case the heart did not show an increase in size, electrocardiogram changes and clinical signs of progressive myocardial weakness until after four years.

CONCLUSIONS

A case of traumatic rupture of the chordae tendineae of a normal mitral valve is reported and the symptomatology and criteria necessary for a diagnosis is discussed.

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Borderline and Atypical Hyperthyroidism

Among the nonthyroid conditions resembling thyrotoxicosis neurocirculatory asthenia is probably the commonest. This usually occurs in young persons and some enlargement of the thyroid may be present. Nervousness, fatigue, palpatation, dyspnea, tremor and emotional imbalance may appear both in hyperthyroidism and in patients with effort syndrome. Both patients may be hyperkinetic and may suffer from phobias, insomnia and apprehension. The cold wet palms, the pulse rate varying from slow to excessively rapid, the absence of widened pulse pressure, the marked vasomotor instability and the normal basal metabolism usually serve to identify the neurasthenic.

It also is necessary to examine the possibility that true hyperthyroidism may occur in the presence of neurocirculatory asthenia. In other words, the neurasthenia may mask the thyroid disease. If there is a persistent elevation of the pulse rate even at rest, or if the basal metabolism is persistently above normal, hyperthyroidism should be strongly suspected. If the metabolism falls appreciably after iodinization, the diagnosis of hyperthyroidism may be made.—Cyril M. MacBryde, M.D., St. Louis; The Jour. of the Mo. State Med. Assn. Vol. 34, No. 12; December, 1937.

Fatal Streptococcic Infections

I wish to speak briefly on the second type of infection in which early operation kills. In streptococcic infection there often is much swelling and the marked edema gives the sense of fluctuation which with the redness suggests that there is pus in the tissues. It is a mistake to incise early and the treatment should be without manipulation or other trauma. For example, a doctor I knew, in operating for septic appendicitis, pricked his thumb. Within two or three hours he had a chill and a temperature of one hundred and two. Incision of the thumb under anesthesia was promptly followed by another chill and fever of about one hundred and four. Therefore, a few hours later the alarmed consultants again anesthetized the doctor and opened the wound more freely and curetted it again with chill and increased temperature. Then amputation of the thumb was advised, although a full blown blood stream was present which soon was fatal. This is the type of infection in which operation and manipulation kills.

For a streptococcic type of infection from an injury of any type, put on a big wet dressing of yellow oxide ointment, and keep the part and the patient absolutely quiet and consultants from handling, squeezing or doing any operation upon the part—procedures that convert a local into a blood stream infection. If you are personally thus infected, immediately go to bed, keep absolutely quiet and if necessary, lock the door to keep out meddlesome friends; then you will have the best chance of recovering.—W. Wayne Babcock, M.D., Philadelphia, Pa.; Delaware State Med. Jour., Vol. X, No. 1, January, 1938.

Chronic Alcoholism

There are two general types of excessive drinking: symptomatic drinking and true alcoholic addiction. In the former the excessive use of alcohol is a result of some underlying pathologic condition for the symptoms of which alcohol affords relief; whereas in the latter true addiction, which requires on the average about seven years of heavy drinking to become established, there is a real "craving" for alcohol. The treatment of symptomatic drinking is simply the treatment of the underlying pathologic condition the symptoms of which alcohol relieves. The treatment of true addiction on the other hand is a much more complicated psychiatric procedure usually requiring hospitalization and involving two distinct stages—the stage of withdrawal of alcohol and the stage of substitution for alcohol of some other socially acceptable means by which the patient can obtain the same satisfactions that alcohol has previously given him.—Robert Fleming, M.D., Boston, Mass.; The New Eng. Jour. of Med.; Vol. 217; No. 20; November 11, 1937.

CASE RECORD PRESENTING CLINICAL PROBLEMS

A man, 53, diagnosis "Pneumonia" which proved otherwise.

By HARRY L. REINHART, M.D.

A WHITE male, 53 years old, was admitted to Grant Hospital with a tentative diagnosis of "pneumonia". He was irrational, dyspneic and somewhat cyanotic. The onset of his illness was about "three weeks ago with a cold of influenzal type", which seemed to develop into a pneumonia.

Admission physical examination revealed impaired expansion and dullness throughout the right chest with scattered moist rales and bronchial breathing. The heart rhythm was irregular and the sounds were indistinct. No murmurs were heard. His pulse was 118, respirations 18 and temperature 102°.

An X-ray of the chest revealed "the right side almost opaque from pneumonic infiltration; considerable infiltration throughout the left lung".

The blood count on admission was: Hb. 78 per cent (Dare), R.B.C. 4,500,000; W.B.C. 28,000; Differential: 92 per cent polys, 8 per cent lymphocytes. A recheck count two days later revealed 3,850,000 R.B.C.; 21,700 W.B.C. with 91 per cent polys, 5 per cent eosinophiles and 4 per cent lymphocytes.

Progress Notes: There were repeated involuntary urinations and bowel movements. During the second and third day he coughed up some bloody sputum. The temperature fluctuated around 102, pulse varied between 90 and 102, and the respirations were below 20 (sedation from morphine), until the last day when they gradually increased to 40.

The above history was obtained on admission. The following additional information was subsequently obtained.

Previous to the onset of the present illness, the deceased had been engaged in active physical labor. He had been somewhat short of breath for about one year. He had not been orthopneic, and had noted no swelling of the ankles, dyspnea or palpitation.

About one month before his admission to the hospital he was assisting in loading and balancing some heavy boxes, when he suddenly complained of severe pain in his right leg. There was no superficial redness or swelling of the thigh. About one week later (three weeks before hospitalization) he was confined to bed with a right sided pleurisy. He remained in bed for five days when he felt well enough to get up. Within the following 24 hours he was seized with a terrific pain in the right chest which caused him to rush about the room and he was unable to obtain any relief. He was not cyanotic but thought he was going to die. He was put back to bed, developed a cough with bloody sputum and became jaundiced. He also complained of pain in the right groin and would not permit massage of this area. During the following week (second week before hospitalization) he developed dullness to percusion of the right lung, and a friction rub at the right base. His temperature was normal and his blood pressure was 120. One week before his admission he had a sudden sensation as though something had given way under the sternum. When seen the following day in consultation, his blood pressure was 80/50. There was moisture at both bases with dullness at the right base. The heart sounds were indistinct. $P_2 > A_2$. Both sounds were diminished. A diffuse precordial friction rub was heard. His abdomen was slightly distended. The temperature was 102°. W.B.C. 22,000 with 87 per cent polys. His legs appeared symmetrical.

Dr. Reinhart: Anatomical Diagnosis:

1. Infarction of right lung.
2. Bilateral pulmonary embolism.
3. Arteriosclerosis and thrombosis of right coronary artery.
4. Infarction of right ventricle.
5. Acute diffuse fibrino-sanguinous pericarditis.
6. Intra-auricular and intra-ventricular thrombosis.
7. Small recent infarcts in liver, spleen and left kidney.
8. Thrombosis of right iliac and femoral veins.
9. Moderate hypertrophy of the heart.
10. Congenital absence of right kidney and compensatory hypertrophy of left kidney.

The anatomical diagnosis should be an aid in clarifying the rather confused and perhaps inadequate clinical picture of this case. There was clinical evidence of myocardial impairment manifested by the "shortness of breath" of one year's duration. The shortness of breath is suggestive of an impaired vital capacity from left ventricular myocardial insufficiency. Clinical evidence of such an insufficiency developing in an individual of 45 years or older without previous heart disease is most frequently the result of hypertension or coronary arterial disease or both. The anatomical investigations in this case demonstrated such a background. The absence of "cardiac or anginal pain" is not significant; it may be absent in advanced coronary disease and is frequently absent in the presence of congestive heart failure.

The pain which appeared in the right leg apparently associated with the physical exertion of loading heavy boxes is more difficult to evaluate but may be attributed to the thrombosis of the right iliac and femoral vein, which is not infrequently an early or clinically latent manifestation of congestive heart failure. There was no

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Presented before Intern Staff at Grant Hospital, Columbus, Ohio.

This is the twenty-sixth of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

evidence of an injury to this region discernible at the necropsy.

The right sided pleurisy which necessitated bed rest approximately one week later may be ascribed to a pulmonary embolism from the right iliac vein thrombosis. This apparently was followed by a second pulmonary embolism with a larger lung infarction, five days later, which was clinically manifested by the severe pain, apprehension of death, cough with bloody sputum and jaundice. This may be taken as an example of the rather common sequence of myocardial insufficiency, consequent slowing of venous flow, iliac vein thrombosis and pulmonary embolism. Although the dramatic traumatic and postoperative pulmonary embolism is more frequently anticipated, the actual etiology is often a latent or undiscovered myocardial insufficiency.

The "sudden sensation as though something had given way under the sternum", one week later is suggestive of a coronary thrombosis and infarction of the heart. It was following this incident that the pericardial friction rub was heard and distinct clinical evidence of shock, indistinct heart sounds and leucocytosis were noted. Although not manifest in the history, probably being over-shodowed somewhat by irrationality during the terminal phase of the illness, the anatomical investigations indicated subsequent pulmonary emboli, terminating with an embolus occluding the left pulmonary artery. These emboli had their source in the softened intra-auricular and intra-ventricular thrombi. There were no infarctions in the left lung. The infarction of the right lung and the fixation and organization of the clot in the right pulmonary artery were distinctly older than the myocardial thrombi and infarction.

The infarcts in the liver, kidney and spleen were the result of thromboses and an anatomical manifestation of congestive heart failure.

Dr. Robert C. Kirk, Commentator:

This patient was of extreme interest clinically because of the relation of his pathology to his history and physical findings. The reconstruction of this case points clearly to the preceding sequence of events as shown by the post-mortem. In resumé, we clinicians, are taught, or at least have re-emphasized to us the extreme importance of vascular disease as it relates to the other organs and to our diagnosis. It is not at all a foregone conclusion that the eventual outcome—death—could have been avoided, but it is interesting to speculate upon the possible course of events could we have made the proper diagnoses at the proper time and possibly have anticipated the sequelae.

If a medical examination had been conducted six months previously to determine the cause of the shortness of breath it would have definitely determined the presence or absence of hypertension. It is doubtful if much could have been determined about the amount of actual heart damage present without an electrocardiograph which would almost certainly have shown some T wave changes compatible with coronary artery disease. With such findings we would certainly advise against excessive physical exertion, such as he was indulging in at the time of his leg injury.

The combination of myocardial changes and acute exertion were probably important factors in the development of the thrombosis in the right femoral vein. Situated as it is rather deeply in the thigh, the physical findings of inflammation are usually absent and diagnosis of this condition is difficult. Had it been possible to suspect it, the use of an elastic bandage and moderate exercise would probably have been preferable to immobilization which tends to increase stasis and keep the vein walls open for easy dislodgement of thrombi.

The sudden onset of an acute episode of right chest pain—pleuritic in type, should make one immediately suspicious of pulmonary infarction in the absence of some complicating upper respiratory infection. It is well to remember that at least 50 per cent of all pulmonary-emboli result from cardiovascular disease, excluding postoperative emboli, which also frequently have a cardiovascular background.

The treatment at this point is subject to a great deal of confusion and disagreement, because of the diversity of opinion about the causation. The Royal College of Physicians with Lord Moynihan in the chair, held a symposium on this important subject two years ago where the widest extremes of opinion were upheld by various men and no conclusions were reached. More recently several French investigators have attacked this problem experimentally. Theoretically they advance the idea of a sympathetic reflex spasm of the pulmonary artery as the cause of death in pulmonary embolism and present considerable experimental and clinical studies supporting their use of ephedrine, bicarbonate of soda, and atropine both in suspected and clinically proven cases of pulmonary infarction.

"Within 24 hours after he got up he was seized with a terrific pain in the right chest which caused him to rush about the room with no relief. He was not cyanotic but thought he was going to die. He was put back to bed, developed a cough with bloody sputum and became jaundiced". Such

a story is a classical description of a large enough pulmonary embolism to cause rather massive infarction. The jaundice is an extremely common and quite diagnostic sign. Survival from a large pulmonary embolism and infarction is reasonably common. Pulmonary embolectomy has been successful in only nine of 130, a mortality much too high to be very seriously considered. Under sedation and with bed rest, the patient appeared to be doing well until a week before admisson when he had a sudden sensation as though something had given way under the sternum. He went into shock, developed rales at both bases and an irregular pulse. A diffuse precordial friction rub was heard by a consultant 24 hours later. It is evident that another process is now taking place—as evidenced by pericarditis—namely some form of heart damage.

A diagnosis of coronary occlusion of the anterior type was made at this time supported by an electrocardiogram taken on the day of admission to the hospital. Did the pulmonary emboli have anything to do with the coronary occlusion? More than likely the severe strain on the right heart incurred during the embolic manifestations, (which Katz, Krumbhaar and others have demonstrated experimentally to be an extreme ballooning out of the right auricle following pulmonary artery clamping), so altered the physiology of an already laboring myocardium as to result in a fatal complication. That the prognosis was grave could be assumed by comparing this patient's findings with those given by Herrmann; (1) A conspicuous drop in the systolic blood pressure with extreme hydrodynamic heart failure, cardiac dilitation, shock and collapse; (2) Considerable febrile reaction over 101° of fever persisting for more than four days; (3) A high leucocytosis of 20,000 or more for four days or more; (4) Appearance of irregularities of rhythm; (5) The prompt development of a friction rub; (6) The occurrence of embolism. Only the finding of 5 per cent eosinophiles was against such a prognosis.

White, Barnes and others have recently called attention to a rather characteristic posterior infarction type of electrocardiograph which occurs in pulmonary embolus, but my investigation of about 25 cases of pulmonary embolus where electrocardiographs were taken out of a series of 150 cases occurring at the Cornell Medical Center, failed to reveal any characteristic electrical changes other than those in the RT segments and T waves such as may occur in any type of coronary occlusion. In conclusion it must be said that there is little evidence of any characteristic electrocardiographic changes in pulmonary embolism and the tracing in this case must be attributed to a combination of infarctions of the right coronary artery and the right lung.

Medico-Legal Aspects of Fractures

In diagnosing and reducing and treating fractures, the following suggestions will be helpful to you in the event of a malpractice suit, even though some of them may seem unnecessary from the viewpoint of the physician, and may be calling for a higher degree of care than required by law:

1. If there is the slightest reason to suspect a fracture, at the site of a visible injury or elsewhere, make a thorough X-ray examination.

(a) If X-ray apparatus is not available in your community, or if the patient refuses to authorize X-ray examination, be sure to advise the patient in the presence of reliable witnesses that you advise the use of X-ray, and that you will not be responsible for any error of diagnosis or treatment which could have been prevented by the use of X-ray or fluoroscope.

2. If you are not skilled in interpreting X-ray pictures, do not hesitate to get competent help. Even if you are skilled in interpreting X-ray pictures or in reducing fractures, it is advisable to have one or more competent physicians in all cases where bad results might follow to examine the X-ray pictures and to confirm your diagnosis, and to verify the diagnosis and the position of the bones after reduction.

3. In cases of severe fractures where bad results are likely to follow, even at the hands of the most skillful, do not undertake to handle the case unless you are an expert in that line, without first recommending to the patient that he consult such an expert, and if he refuses, inform him before you accept employment that you recommend that he consult an expert and that you do not undertake to use any more care or skill than the average physician practicing in the same line of work as yours uses and possesses.

4. If a patient should enter a hospital in order to receive proper diagnosis and treatment and refuses to do so, inform him in the presence of reliable witnesses that you will not be responsible for any bad results which could have been prevented had the patient entered a hospital.

5. Check your diagnosis carefully. Consider every symptom and every detail of the history and be sure to use every diagnostic aid available, and if you have the slightest doubt as to whether or not your diagnosis is correct, do not hesitate to consult another doctor whom you consider as able or abler that you to confirm your diasosis.

6. Keep good office records of the case and preserve them.—Grover Middlebrooks, Atty. Atlanta, Ga.; Jour. of the Med. Assn. of Ga.; Vol. XXVII, No. 1; January, 1938.

TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distribued by the Component Society, the Ohio Public Health Association

EFFECTS OF CONTAGIOUS DISEASES EXAGGERATED

Scattered studies made in Europe to determine the effect of whooping cough, chickenpox, scarlet fever and measles on the tuberculin reaction, and on active or inactive tuberculous lesions, indicate that the effect of the contagious diseases on tuberculosis has been exaggerated and may be very doubtful. This supports the findings of the author in a study made at the William H. Maybury Sanatorium, which included 43 children with measles, 39 with chickenpox, 16 with whooping cough, 13 with scarlet fever, 30 with mumps and 6 with diphtheria, making a total of 147 cases of acute infectious disease in a group of 118 children convalescing from pulmonary tuberculosis of the childhood-type. The ages of the children ranged from 6 months to 15 years. All had X-ray examinations of the chest a short time before the onset of the contagious disease and directly after the expiration of the quarantine period. Eighty-three of the 118 children had active pulmonary tuberculosis of the childhood-type; the remaining 35 had quiescent or apparently arrested disease.

In 4 of the 43 cases of measles the intracutaneous tuberculin test with Old Tuberculin became negative to a dose to which they were positive before, but were again positive two weeks after the disappearance of the eruption. Six cases, showed by roentgenological examination, an increase in the pre-existing tuberculous process but none of these occurred in less than one month after the measles. In each instance the exacerbation of the tuberculosis was an evanescent occurrence and all recovered completely in a few months.

Two of the 16 children with whooping cough showed exacerbation of the tuberculous disease. In one case this occurred during the course of whooping cough but subsided promptly. Three of the cases of chickenpox experienced extensions of their tuberculous lesions none of them showed any change in the tuberculin reaction. Of the 25 children with mumps, 24 were positive to tuberculin before and after the disease. However, a change in the type of the reaction was noticed in several. None of the mumps patients showed reactivation or exacerbation of their tuberculosis.

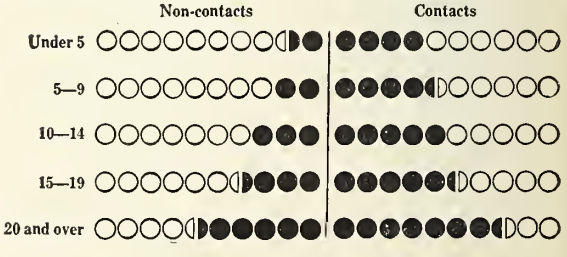
Of the 13 cases with scarlet fever, only one showed a spread of the tuberculous process. None of the 6 cases of diphtheria experienced any ill effects so far as their tuberculosis was concerned. The children with scarlet fever and diphtheria were not tested with tuberculin.

In the discussion, the author points out that only 12 children of the 118 showed any increase in the tuberculous lesions during convalescence. This closely parallels the experience of similar groups of patients whose tuberculosis was not complicated by acute contagious diseases. In the great majority of those who showed increase in tuberculosis, the extension occurred several weeks after the intercurrent disease had subsided. None of these remissions occurred in quiescent or apparently arrested lesions showing that the old foci were not disturbed by the intercurrent contagious disease. The remission seen in the active tuberculous lesions could be safely considered coincidental and unrelated to the contagious disease.

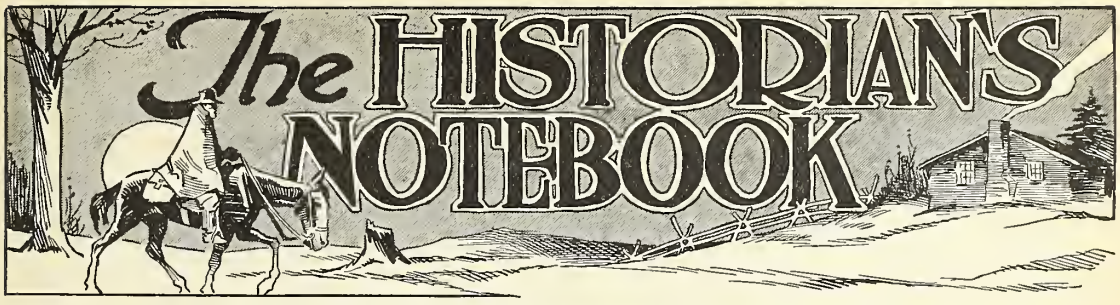
Very little evidence was found to support the contention that measles or any of the other contagious infections have a depressing effect on the body's capacity to react to tuberculin. In the majority of previous studies the Pirquet method was employed for giving the tuberculin test. This may explain the apparent discrepancy, because the Mantoux test which is more precise, was used in all of the author's cases.—The Effect of Contagious Diseases on Pulmonary Tuberculosis and on the Tuberculin Reaction in Children, J. P. Nalbant, American Review of Tuberculosis, Vol. XXXVI, No. 6, December, 1937.

Results of Tuberculin Tests

Tuberculin reaction studies made with purified protein derivative in various parts of the country were collated by the Statistical Service of the National Tuberculosis Association. The graph, based on 56,688 tests, pictures the steady increase in the percentage of reactors with increasing age. It contrasts also the far greater percentage of reactors among Contacts as compared with those among Non-contacts.



Each circle=10% of group tested
Solid black: Positive Outline: Negative



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

TRAVAILS OF PIONEER PHYSICIANS

By DONALD D. SHIRA, M.D., Columbus, Ohio

BEING the dramatic story of a physician who was man-handled 128 years ago because he had the courage to vaccinate his own children against smallpox. Evidently the *hoi polloi* did not relish medical innovations in those days, unless sponsored by quacks, much better than they do today. Following is a copy of a petition addressed to Gov. Samuel Huntington in 1810 at Chillicothe, the then capitol. It is written in a hybrid German-English long hand, the deciphering of which required no little patience and ingenuity. The document was discovered among state papers in the archives of the Ohio State Archaeological and Historical Society.

"His Excellency Samuel Huntington governor & Protector of the State of Ohio—

"The Petition of Jno. Michael Shaug of the Town of New Lancaster, Fairfild County, a good and peaceful citizen upwards of three years & behaved himself well since we know him & been of particular servis to the inhabitens of Fairfield in his professtion as Physition & Surgen Humbly shews that on wetnessday January the Twenty fifth 1810 the petitioner has inoculatet 3 of his childern with Small Pox the Pox first beeing natural in the county. for the same he has been most shokingly abused on the 29th of January. five men Jonathan Lynsh Thomas Cestnee Timothy Sturgen Wm. King Jas Hardy has come to the house of the Petitioner with several guns— King shot a bullet through the window at the wife of Jno. M. Shaug broke the door & lock open came into House Jonathan Lynsh Took Hold of the wife of Shaug pulling her about & hauled her out of the house beat & pushed her with the rifle gun removed her with 3 children 2 or 3 miles in the country in a could cabin. Took hold of Doct Shaug Squeeset & Pullet him about his back verry much hurt & has received a Rupture your petitioner waiting your order for the said famely to return in paece & safety to ther dewelling & enjoy the Benefit of ther property as a good & paeceable citizen your Petitioner wishing your honor to grant a permit to inoculate the small pox the subscribers famelis for the benefit & safety to them & further your petitioner evermore prays."

The petition carries some forty signatures and marks, nearly all of which are illegible.

On the back of the petition appears the following notation:

Doct. Jno Michael Shaug's
Petition
Enclosing Judge Carpenter's Letter
Febry. 2nd 1810
Announced Febry 4th 1810
Petition Refused

* * *

BIOGRAPHICAL NOTE

"Dr. John Michael Shawk (Shaug) was the first physician who came to Lancaster. He arrived from Lexington, Ky., in the Spring of 1801, over Zane's trace from Limestone (Maysville), at a time when there were less than a half dozen cabins on the entire route, with the exception of

The Author

● Dr. Shira is a graduate of Ohio State University College of Medicine, 1914; former health commissioner of Akron and Summit County; assistant secretary Ohio Public Health Association.

Readers desiring reprints of articles appearing in this department must place their order with *The Journal* within 15 days after date of publication.

a small settlement at Chillicothe. Lancaster had just been plotted and the first lots sold the previous November. It was at that time a patch of woods, with a few log cabins scattered about.

"Dr. Shawk (Shaug) purchased two lots fronting Main street and after hiring Mr. Gaster to clear off the ground and enclose it with a rail fence, he returned to Lexington. In the spring of 1806 he returned with his family and commenced the practice of medicine at a point exactly where the Hocking canal crosses Main Street, and in a building erected by one Dr. Irvin, who seems to have come to the place during his five years absence . . . . Dr. Shawk (Shaug) lived to a venerable old age and died in his house in Lancaster in 1846."

EARLY OHIO BLUE LAWS

IT is sometimes difficult to reconcile the lofty idealism of the medical profession with the tendency on the part of many physicians to indulge in petty differences and semi-imaginary grievances. Why is it that the most altruistic and self-sacrificing servants of mankind in the world should eternally be eyeing their confreres askance? Any attempt to answer the question is futile. It has been so since time immemorial. Even the revered Hippocrates was unable to escape wholly the testy barbs of his contemporaries. In knowledge there is strength. Is it possible then that some, acutely realizing their own comparative inadequacy, resort to unworthy means to assail the position of those admittedly superior? If so, such rationalizaton has shifting sands for its premises—shifting sands which tend to undermine equally the individual and the profession as a whole. Not every politician can be a Lincoln, nor every physician an Osler. Innate ability, capacity and intellectuality are as widely divergent in the ranks of the medical profession as in any other vocation. One could spend countless hours in philosophical reflection on the subject and get exactly nowhere—which is exactly where this article is getting.

Apropos to the foregoing theme a satiric effusion gleaned from the Inquisitor and Cincinnati Advertiser, May 22, 1821, is reproduced. Just what motives prompted the author of this pasquinade to rush into print some 117 years ago? Your guess is as good as anyone's. Was it professional—say apprehensiveness? Pique at competition? Some fancied slight? Ineligibility to membership? Was he a Thompsonian or steam doctor? At any rate the article is reprinted in the hope that it may bring a smile to some weary-worn M. D. who has been up two or three consecutive nights on gratis obstetrical cases.

History of Fairfield and Perry Counties Ohio, by A. A. Graham.

"TO THE INQUISITOR

"A LEATHER MEDAL, of the value of Five Dollars (Corporation Scrip) will be awarded to the author of the best poem, which shall be written on or before the first day of July, next, in praise of the Cincinnati Medical Blue Law Association, *for the promotion of harmony and the charging of higher fees.* The poem to contain at least a half dozen couplets, be concisely commemorative of that invaluable society, and penned as a kind of preface or introduction to the Constitution and By-Laws, a second edition of which will be put to press immediately after the period at which the Medal is to be awarded.

"The Secretary of the Association, having *suddenly disappeared* (and the Constitution forbidding the election of another for some time to come) it is therefore respectfully requested that candidates for the Medal will have their poems published in the Inquisitor, at any time previous to the appointed day of adjudication.

"The triumphant success of the Association, its rapidly increasing popularity, and its late ponderous physical accession, fully warrants a *guess* that ere long it will shed its *blue-light* over all the medicinal disciples of Aesculapian Science and bountifully benefit every rising ramification of this rantipole (sic) region.

"N. B. The Medal will be ornamented with an expressive device and struck upon a piece of well-tanned sheepskin.

May 22, 1821"

"PHYSICAL EXPULSION

"Supposed trial and condemnation of a member of the Cincinnati Medical Blue Law Association for non-conformity to its rules and regulations: extracts from the records.

"Harmony Hall, May 20, 1821.

"At a special meeting of the Physical Court of Honor for the Cincinnati Medical Blue Law Association Dr. McFidgens was solemnly arraigned for a high misdemeanor, on the following information to wit:

Dr. Pilgarlic avers that he has been for a long time the attending physician for a certain Mr. Sensible and his family, and, as he verily believes, has given general satisfaction, but that recently the deportment of the aforesaid Mr. Sensible towards him has been very considerably changed, and he is fearfully apprehensive that he will shortly receive his *mittimus*: all of which he declares is owing to a certain species of undefinable assiduities manifested by one Dr. McFidgens toward the wife of Mr. Sensible—such for instance as doffing his beaver upon every meeting, inquiring after the health of her family, and offering her divers other unlawful civilities for which the aforesaid informant prays that the aforesaid Dr. McFidgens may be tried and, if found guilty, suffer the penalty in such case made and provided.

"The accused, being called, pleaded with uplifted hands *'not guilty'*: declaring that his deportment towards Madam Sensible was only such as dictated by ordinary politeness, and sanctioned by the common law of the land: and averring moreover, that *statute laws* running counter to *common laws*, are unconstitutional and of none effect.

"The testimony having been heard, and the

case maturely considered, the court gave the following opinion:

"In the case under consideration, the accused admits in part, the charges alleged against him, but denies the constitutionality of statute laws when contravening a custom long sanctioned, and *whereof the memory of man runneth not to the contrary.*

"The court however can recognize no such doctrine, and, from the testimony, are clearly of the opinion that the accused has violated one of the fundamental rules of the Association, and therefore merits the infliction of the penalty in such case provided.

"The Court of Honor, therefore, declare that Dr. McFidgens is hereby expelled from the Cincinnati Medical Blue Law Association and that he is no longer to be regarded as a gentleman practitioner by any orthodox member of the Physical Blue Law Fraternity.

"N. B. The public are hereby cautioned against employing, hereafter, the said expelled Doctor, as the law will be rigidly enforced against any person applying for medical service to others than the members of this invaluable institution.

"*Ordered*: That the foregoing proceedings be published in the Inquisitor."

WAITE WADSWORTH BREWSTER

Waite Wadsworth Brewster, oldest child of Sardius Brewster, was born in Mexico, New York, June 4, 1810. He attended Cazenovia Academy where he graduated. Attended Hamilton College and graduated from there in 1835.

He studied medicine with his father and Dr. Delamatre, later continuing his medical studies in New York City.

He attended the session of 1840-41 at Willoughby Medical College, registering from Perry, Lake County, Ohio, but was not graduated. He was given the honorary degree by Willoughby Medical College in 1844.

In 1840 he married Abbey Turney Seeley in Painesville, Ohio. He practiced medicine in Massillon, Ohio, for a time and about the year 1846 came to Austinburg, Ohio, where he lived continuously until his death on June 16, 1888, and is buried in the Centre Cemetery there.

Mr. Brewster was a successful physician for many years, gradually retiring from active practice at the wish of his family a few years before his death. Naturally a man with scholarly tastes, a good Latin student, he often found diversion in translating the odes of Horace, which were published in New York City papers, a custom with city daily papers more common formerly than now. In college he belonged to a literary society called Phi Gamma Alpha, and he was a Sigma Phi. He enjoyed riding horseback and fishing.

Although never a very rugged man physically he enjoyed good health all his life, and was never deterred in answering calls in the most stormy weather to go miles in deep snow, and was as quick to respond to calls for help regardless whether he would receive a penny for his services as in cases where he might expect prompt pay.

WILLIAMS VS. HAWLEY

There was the famous malpractice case of a poor woman, thrown from a horse, breaking the bones of her leg just above the ankle. Dr. Orestes K. Hawley, the leading physician of that region, (Jefferson, Ashtabula County,) in reducing it, removed a section of the smaller bone. Joshua R. Giddings, quite young then brought the suit. All the doctors were against him. He won a verdict. The defendant appealed to the supreme court, where he had a second trial. This resulted as before.

The court set aside the verdict, and changed the venue to Trumbull County. The case was prepared anew. The famous surgeons of New York and Philadelphia gave depositions. The plaintiff's counsel spent months and hundreds of dollars of his own money. The celebrated John C. Wright was secured from Cincinnati for the defense. The case was tried for the third time, with a third verdict—heavy for that day—for the plaintiff, none of which, it was said, went to compensate or reimburse her counsel. This case made the name of young Giddings known throughout the state.

* * *

Dr. Jacob Vosburg was the first physician who located in Monroe Township, Ashtabula County. He came about the year 1819, and settled a mile northeast of the village. He remained but two or three years and then removed to Erie, Pennsylvania. He was a well-read physician of the Allopathic school.

The second physician was Dr. Greenleaf Fifield, who located in Monroe soon after Dr. Vosburg left. Dr. Fifield practiced here about one year, and then removed to Conneaut, where he spent the remainder of his life and gained a high reputation in his profession.

Dr. Stephen G. Holbrook was the next physician to settle in the township. He came about the year 1824, when but a young man, and soon afterwards married a daughter of Martin Kellogg. He continued to reside in the township and to practice his profession for a period of fifty years, or until his death, which occurred in the year 1875.

* * *

The first physician of Conneaut Village, Ashtabula County was Dr. John Venen, who settled there in 1815. He was very successful, and practiced his profession in Conneaut for nearly 60 years, dying March 20, 1875, at the ripe old age of 92.

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PROCEEDINGS OF THE COUNCIL

Policies on Several Important Questions Formulated at Feb. 6 Meeting; Program and Arrangements for 1938 Annual Meeting Approved

THE regular meeting of The Council of the Ohio State Medical Association was held Sunday, February 6, 1938, in the State Headquarters Office, Columbus, Ohio, with the following present: President Alcorn, President-Elect Hein, Past-President Huston, Treasurer Beer; Councilors Hogue, McCormick. Paryzek, Skipp, Kirkland, Brush, Seiler, and Sherburne; Dr. Upham, Dr. Platter, Dr. Davidson of Akron, Executive Secretary Nelson and Assistant Executive Secretary Saville.

On **motion** by Dr. Huston, seconded by Dr. Beer and **carried**, the Minutes of the November 21, 1937, meeting of The Council were approved as published in the January, 1938, issue of *The Journal*, pages 68-74.

Membership Statistics—It was reported that the paid-up membership in the State Association was 4,615 as of February 6, 1938, compared to 4,483 as of February 6, 1937, and compared to 5,943 as of December 31, 1937.

REPORTS OF COUNCILORS

Second District—Dr. Hogue reported that plans are being completed for the Second District Meeting on March 30, at the Dayton State Hospital. In his report he paid tribute to the late Dr. A. C. Messenger of Xenia, for many years an active worker in medical organization.

Fourth District—Dr. McCormick reported that all societies in his district were active and alert, and that there was general enthusiasm in Northwestern Ohio relative to the Regional Postgraduate Lectures just concluded in that part of the state.

Fifth District—Dr. Paryzek, appointed to serve the unexpired term of the late Dr. A. A. Jenkins as Councilor of this district, reported that he had attended a recent meeting of the Huron County Medical Society and was planning visits to several other societies in the near future.

Sixth District—Dr. Skipp presented a report on visits to several county societies since the last Council meeting. He announced that a meeting of the Sixth District would be held at Youngstown on February 16 and that a program on "Fractures" would be presented. Dr. Skipp also presented a report on conferences being held in Akron between representatives of the Summit County Medical Society and organized labor with respect to a proposed health insurance plan.

Seventh District—Dr. Kirkland stated he planned to visit several societies during the next few weeks.

Eighth District—Dr. Brush stated that he had been in touch with societies in his district and that he planned to visit a number of them during the next month.

Tenth District—Dr. Sherburne reported on visits to three societies in his district during the past few weeks and that he hoped to visit the remaining societies between now and the Annual Meeting.

1938 ANNUAL MEETING

Program to Date Approved—Dr. Sherburne, chairman of the Committee on Scientific Work, reviewed in detail the program arranged to date for the 1938 Annual Meeting, Neil House, Columbus, Ohio, May 11 and 12. Also, he presented a list of applications for space in the Scientific Exhibit previously approved by the Committee on Scientific Work. On **motion** by Dr. McCormick, seconded by Dr. Hogue and **carried**, the program and applications to the Scientific Exhibit were approved.

Personnel of Local Committees—A report from Dr. Verne A. Dodd, general chairman of the Local Committees on Arrangements, was considered by The Council. On **motion** by Dr. Brush, seconded by Dr. Beer and **carried**, the personnel of local committees, as selected by Dr. Dodd, were approved.

Annual Banquet—On **motion** by Dr. Huston, seconded by Dr. Sherburne and **carried**, The Council voted to underwrite expenses for entertainment at the Annual Banquet to an amount not to exceed $300 to be used in case income from the sale of banquet tickets is not sufficient to meet such expenses.

REPORTS OF COMMITTEE ON PUBLIC RELATIONS AND ECONOMICS

Legislative Problems—A written report from Dr. C. W. Stone, chairman of the Committee on Public Relations and Economics, dealing with present and anticipated legislative questions was presented and given careful consideration. On **motion** by Dr. Sherburne, seconded by Dr. Paryzek and **carried**, the report and recommendations of the committee were adopted.

Employment of Nurses—The following report from the committee was presented and, on **motion** by Dr. Huston, seconded by Dr. Beer and **carried**, was approved and adopted:

"At a meeting of the Committee on Public Relations and Economics on January 9, 1938, a communication from Mrs. August, general secretary, Ohio State Nurses' Association, with respect to the Statement of Policy regarding the practice of medicine by nurses, technicians, etc., adopted by The Council at its last meeting, was read and discussed. The communication pointed out that many nurses, employed in industrial and mercantile establishments, are not registered nurses and stated that the Board of Trustees of the Ohio State Nurses' Association would welcome the active cooperation of medical organization in efforts to try to improve the quality of nursing care by having all nurses become registered nurses. The committee voted to recommend to The Council that The Council call this matter to the attention of component medical societies suggesting they encourage their members to use only registered nurses where it is feasible to do so, and also to recommend to industrial and mercantile establishments that this policy be followed in the employment of nurses for plant hospitals, first-aid stations, etc."

Cooperation with P. T. A.—On behalf of the committee, the following report was submitted and, on motion by Dr. Sherburne, seconded by Dr. Huston and carried, was approved and adopted:

"The Committee on Public Relations and Economics in session January 9, 1938, received a suggestion from the Sub-Committee on Public Health Education that the Committee on Public Relations and Economics consider ways and means of bringing about a closer relationship between medical organization and parent-teacher groups. After a general discussion, the committee approved the following recommendation to The Council:

> "Whereas, public health activities and programs in the public schools are of vital importance and should have proper medical supervision and guidance, and
>
> "Whereas, parent-teacher groups can exercise great influence in seeing that such activities and programs are carried on in compliance with sound medical principles and policies,
>
> "Be It Resolved, That The Council of the Ohio State Medical Association urges component county medical societies of this Association to give this question their earnest consideration; endeavor to enlist the cooperation and assistance of parent-teacher organizations in their respective communities in establishing and maintaining school health programs on a sound basis; and encourage parent-teacher groups sponsoring such programs to seek the advice of medical organization, and
>
> "Be It Resolved, That county medical societies consider establishing a special committee for such purposes or instruct a regular standing committee to carry out the recommendations contained in the preceding paragraph."

Group Health Association, Inc.—The Committee on Public Relations and Economics reported that it had completed a careful study of data relative to Group Health Association, Inc., now operating in the District of Columbia. Based on that study, the committee presented the following Statement of Policy for consideration by The Council, which statement, on motion by Dr. Brush, seconded by Dr. Sherburne and carried, was approved and adopted, and the Executive Secretary was instructed to send copies of the statement to Ohio representatives and senators in The Congress:

Statement of Policy

"The Council of the Ohio State Medical Association has made a careful analysis of authoritative information relative to the purposes and activities of an agency known as Group Health Association, Inc., now operating in the District of Columbia.

"Group Health Association, Inc., was organized and sponsored, and is partially financed by the Federal Home Loan Bank Board and the Home Owners' Loan Corporation, fiscal agencies of the Federal Government. It was incorporated under provisions of the District of Columbia code authorizing the incorporation of benevolent, charitable, educational, literary, musical, scientific, religious and missionary organizations, including societies formed for mutual improvement or for the promotion of the arts.

"The purposes of the organization as set forth in the certificate of incorporation are to make medical and hospital services available to its members and their families, i.e., employes of the Federal Government, except officers and enlisted men of the army and navy, residing in the District of Columbia or within 10 miles of its boundaries, and their dependents.

"Annual membership dues are assessed each member, payable personally or through a wage-assignment plan. Services are rendered through a salaried full-time medical staff and through contracts with hospitals. A central clinic has been established for office calls. Home visits are made if necessary.

"In the opinion of The Council this scheme violates sound legal, medical and governmental principles. On behalf of the medical profession of Ohio, The Council protests the organization of Group Health Association, Inc., and urges the Executive and Legislative branches of the Federal Government to take immediate steps to bring about its dissolution.

"Specific objections to the purposes and activities of the agency are as follows:

"1. Group Health Association, Inc., was organized and is operating without complying with the insurance code of the District of Columbia.

"2. Its status is that of an illegal corporation in that it was incorporated to effect unlawful ends, namely: (a) To provide insurance coverage which it cannot lawfully do under the provisions of the code under which the association professes to be incorporated; (b) To practice medicine which is unlawful if carried on without a license which the association does not possess and cannot obtain.

"3. Subsidizing of Group Health Association, Inc., without legislative authority to do so constitutes an unlawful act on the part of the Federal Home Loan Bank Board and the Home Owners' Loan Corporation and the illegal use of public funds.

"4. The 'check-off' scheme for the payment of annual dues, involves the assignment of government salaries, a practice which has been well established as contrary to public policy and in

the final analysis a method of coercing employes to maintain membership in the association.

"5. Under its plan of operation, Group Health Association, Inc., deprives members and their dependents of any freedom of choice of physician.

"6. Because of the potentially large number of clients which would be served, the large area covered and the fact that the activities of the association involve a system of corporate, contract medical practice, it will be difficult, if not impossible, for the agency to furnish adequate and competent medical care. At present the District of Columbia is well supplied with competent physicians from whom Federal employes may secure good medical care at fees commensurate with their earning power.

"7. There is no evidence to show that there is an unusual amount of lost time among Federal employes because of illness or that lost-time illness among such employes is due to their inability to purchase medical care from physicians in private practice. At the same time, there is no reason to believe that cheapening of medical service through a system of corporate, contract practice will make them more likely to seek medical aid or provide with competent medical care.

"8. Salaries and wages paid to most employes of the Federal Government are sufficient to provide them with a decent living, including medical services. Use of public funds for medical care for this particular group of wage earners is unnecessary and objectionable."

REPORT OF COMMITTEE ON EDUCATION

Regional Postgraduate Lectures—A report on behalf of Dr. C. L. Cummer, chairman of the Committee on Education and the Sub-Committee on Regional Postgraduate Lectures, was presented. Data concerning the first course of Regional Postgraduate Lectures, concluded on February 3 in Northwestern Ohio, were reviewed. The committee reported that the project was, in general, successful and that the lectures had been enthusiastically received by members residing in that section of the state. The following interesting statistics were presented: Total cost of course, approximately $500; total attendance, 978; individuals attending one or more sessions, 331; average attendance per session, 122. Number of sessions attended by individuals—one session, 121; two sessions, 56; three sessions, 42; four sessions, 38; five sessions, 27; six sessions, 18; seven sessions, 9; and eight sessions, 20. Members of The Council expressed themselves as pleased with this new activity, congratulated the committee on the success of the venture and expressed sincere appreciation to all lecturers for their assistance and cooperation.

Opening of Chillicothe Course—The committee reported that a similar course of regional postgraduate lectures had opened on February 3 at Chillicothe, for 19 counties in South-Central Ohio. It was reported that the attendance at the first session had been 168, and that the addresses had been well received. Plans for establishing a course in another part of the state are under way, the committee reported.

Public Health Education—The following report of the Sub-Committee on Public Health Education was presented and, on **motion** by Dr. Huston, seconded by Dr. McCormick and **carried**, was approved and adopted:

"At a meeting of the Sub-Committee on Public Health Education on December 12, 1937, certain recommendations relative to activities of the committee were adopted and subsequently were approved by the Committee on Education. They were as follows, and are being herewith submitted to The Council for consideration, with a request for approval:

"1. That the component county medical societies be notified that the sub-committee endorses the showing by the State Department of Health of the films, 'For All Our Sakes' and 'Science and Modern Medicine', before lay groups as a part of the Ohio campaign against syphilis and that the county medical societies cooperate whenever possible with public health officials in promoting the showing of the films in their respective communities.

"2. That component medical societies be notified that the film, 'Syphilis', produced jointly by the American Medical Association and the U. S. Public Health Service, is available for medical society meetings through the State Department of Health, without cost; requests for the film to be filed with the State Headquarters Office which will subsequently relay them to the State Department of Health.

"3. That the State Medical Association through the Sub-Committee on Public Health Education take an active part in promoting public health education by means of the radio in the following manner:

"(a) The committee urge county medical societies in counties having radio broadcasting facilities to interview officials of local radio stations on the possibilities of having such stations carry regular weekly broadcasts of the American Medical Association.

"(b) The committee to request county medical societies to contact local school officials, urging use of A.M.A. programs as a part of the health education programs in the schools. Cooperation of state school officials in this to be sought by the sub-committee.

"(c) Efforts be made by the sub-committee to secure script and manuscripts from the A.M.A. for county medical societies which desire to produce local public health programs over local radio stations.

"4. That the sub-committee endorse and sponsor an educational program on deafness prevention and amelioration, scope and purposes of the program to be as follows:

"a. Acquainting physicians and the public with the problems of impaired hearing.

"b. Encouraging the formation of committees on deafness prevention and amelioration in local medical societies.

"c. Promoting periodic hearing tests by modern, scientific methods as a part of the medical examination of school children.

"d. Advising: The conservation of residual hearing under medical guidance; the early study

of lipreading; the use of a hearing aid as indicated by otological examination.

"e. Protecting the hard of hearing from the imposition of fraudulent cures and devices.

"f. Cooperating with local and national agencies engaged in improving the condition of the hard of hearing.

"g. Urging the avoidance of wrong methods of swimming and diving.

"Activities of the committee would be to call these points to the attention of local medical societies and urge them to discuss them with local boards of education and local public health departments. Also, the committee would interview state school officials and state public health officials, urging cooperation in an educational campaign of this character. Later, the committee, with the assistance of qualified otologists, would prepare special articles on phases of this subject, for publication in *The Ohio State Medical Journal*, dissemination to county medical societies and possibly newspaper releases.

"5. That there should be more active cooperation between medical organization and parent-teacher groups on medical and public health questions and that this matter be referred to the Committee on Public Relations and Economics for consideration."

PROPOSED AMENDMENTS TO THE BY-LAWS

The question of submitting to the House of Delegates at the 1938 Annual Meeting proposed changes in sections of the By-Laws dealing with the purposes and activities of the Committee on Medical Defense was given careful consideration. After a thorough discussion, on **motion** by Dr. McCormick, seconded by Dr. Paryzek and **carried**, a draft of proposed amendments was approved for publication in *The Journal* and submission to the House of Delegates. (See pages 328-329, this issue of *The Journal* for proposed amendments).

MISCELLANEOUS

Retirement Fund—Dr. Davidson discussed the possibilities of establishment of a physicians' retirement fund by the State Association. On **motion** by Dr. Hein, seconded by Dr. Sherburne and **carried**, the question was referred to the Committee on Public Relations and Economics for study, and with instructions to report back to The Council at a later date.

A.M.A. Study on Medical Care—A telegram from Dr. Olin West, of the A.M.A., calling attention to an editorial published in the January 15, 1938, issue of *The Journal of the A.M.A.*, and asking for certain data on medical service plans for low income groups operating in Ohio, was read and discussed. The Executive Secretary reported that partial information had been assembled and will be sent to Dr. West. The Council also considered a communication and a set of resolutions received from the Medical Society of Westchester County, New York. On **motion** by Dr. Hein, seconded by Dr. Brush and **carried**, these resolutions were referred to the Committee on Public Relations and Economics for study and a report.

Suit for Rent—President Alcorn and the Executive Secretary reported on the status of a suit filed against the State Association by Mr. H. E. Schmidt for rent alleged to be due him on the office space at 131 East State Street, formerly occupied by the State Association. On **motion** by Dr. Huston, seconded by Dr. Hogue and **carried**, The Council instructed the President and Executive Secretary to obtain legal counsel to defend the suit.

Willett vs. Rowekamp Case—A report on the status of the Willett-Rowekamp case, pending before the Ohio Supreme Court and heard by the Supreme Court during the past month, was received.

Working Girl's Budget—A communication from Miss Elaine W. Sheffler, superintendent, State Division of Minimum Wage, requesting the State Association to nominate a physican to serve on an advisory committee to that Division, which is contemplating a study of budget problems for employed women, was presented. On **motion** by Dr. Sherburne, seconded by Dr. Hogue and **carried**, the matter was referred to the Committee on Public Relations and Economics.

1939 A.M.A. Meeting—On motion by Dr. Sherburne, seconded by Dr. Kirkland and **carried**, The Council reiterated its desire to cooperate with the Cleveland Academy of Medicine in its endeavors to secure the 1939 A.M.A. meeting for Cleveland, and authorized the President to send a letter to members of the House of Delegates of the A.M.A. supporting the invitation extended by the Cleveland Academy.

Tuberculosis Insurance—A communication from Dr. Louis Mark, requesting The Council to endorse the Tuberculosis Hospitalization Mutual Insurance Company and its activities, was read. On **motion** by Dr. Seiler, seconded by Dr. Beer and **carried**, The Council instructed the Executive Secretary to inform Dr. Mark that it is not the policy of the Ohio State Medical Association to officially pass on the merits or demerits of insurance contracts and insurance proposals of this character, and that therefore The Council deemed it advisable to take no action on this question.

Unemployment Compensation—President Alcorn reported that Dr. Upham, he and the Executive Secretary had appeared before the State Unemployment Compensation Commission and had supported with oral arguments the application for exemption filed by the State Association, but that to date the Commission had not rendered a decision on such appeal.

Letters of Appreciation—Letters of appreciation from the family of the late Dr. Jenkins,

Councilor of the Fifth District, and from Dr. H. C. Messenger, son of the late Dr. A. C. Messenger, for messages of condolence sent on behalf of The Council, were read and ordered filed.

Ohio Special Train—On motion by Dr. Sherburne, seconded by Dr. Kirkland and carried, the Executive Secretary was instructed to extend to members of state medical associations in neighboring states a cordial invitation to join the Ohio Special Train Party to the A.M.A. meeting in San Francisco next June.

There being no further business, The Council adjourned to meet at the call of the President.

Attest: CHARLES S. NELSON,
Executive Secretary.

Columbus Committees to Handle Details for 1938 Annual Meeting, May 11-12, Appointed

Committees of the Columbus Academy of Medicine, host for the Ninety-Second Annual Meeting of the Ohio State Medical Association, May 11 and 12, Neil House, Columbus, are at work perfecting arrangements for what promises to be the largest and one of the best sessions ever held by the State Association.

Dr. Verne A. Dodd, Columbus, general chairman of the Columbus committees on arrangements, has appointed the following committees to handle various details in connection with the meeting, the complete program for which will be published in the April issue of *The Journal.*

Reception—Dr. Leslie L. Bigelow, chairman; Drs. J. H. J. Upham, H. M. Platter, Wells H. Teachnor, Joseph Price, Andre Crotti, Charles A. Doan, Jonathan Forman, J. F. Bateman, E. J. Emerick, Sidney McCurdy, W. B. Morrison, Mary Ann Graber, and Charles J. Shepard.

Halls and Meeting Places—Dr. Burton F. Barney, chairman; Drs. H. M. Clodfelter, A. A. Hall, Robert C. Kirk, Tom F. Lewis, and Thomas F. Ross.

Annual Banquet—Dr. Louis N. Jentgen, chairman; Drs. George T. Harding, III, Russel G. Means, Edwin J. Stedem, and J. W. Wilce.

Hobby Exhibit—Dr. Paul W. Palmer, chairman; Drs. H. M. Gilmore and C. W. McGavran.

Projection Apparatus—Dr. Harry L. Reinhart, chairman; Drs. H. B. Davidson and Gilman D. Kirk.

Entertainment for Women Guests—Mrs. Huston F. Fulton, chairman; Mrs. J. E. Brown, Jr., Mrs. Harry LeFever, Mrs. Russel G. Means, Mrs. Link Murphy, Mrs. Francis Thomas, Mrs. W. B. Morrison, and Mrs. H. M. Clodfelter.

Membership Batting Averages; Is Your Society Hitting the Ball?

Society	Total Membership for Year 1937	Members Certified Feb. 15, 1938
Adams	18	15
Allen	71	51
Ashland	21	24
Ashtabula	42	40
Athens	41	26
Auglaize	30	25
Belmont	56	54
Brown	7	5
Butler	81	77
Carroll	13	12
Champaign	18	17
Clark	77	65
Clermont	21	23
Clinton	27	23
Columbiana	61	53
Coshocton	20	19
Crawford	29	30
Cuyahoga	1089	898
Darke	34	32
Defiance	18	20
Delaware	24	23
Erie	37	35
Fairfield	35	31
Fayette	16	15
Franklin	470	400
Fulton	19	18
Gallia	25	20
Geauga	10	10
Greene	39	34
Guernsey	29	27
Hamilton	704	644
Hancock	46	41
Hardin	23	25
Harrison	11	13
Henry	15	13
Highland	21	23
Hocking	13	14
Holmes	10	9
Huron	22	12
Jackson	14	16
Jefferson	61	42
Knox	28	25
Lake	23	22
Lawrence	24	20
Licking	55	53
Logan	21	22
Lorain	105	87
Lucas	293	190
Madison	14	14
Mahoning	204	151
Marion	38	37
Medina	27	28
Meigs	11	12
Mercer	17	19
Miami	53	47
Monroe	5	5
Montgomery	299	242
Morgan	11	9
Morrow	9	9
Muskingum	57	50
Noble	1	
Ottawa	14	16
Paulding	11	12
Perry	19	19
Pickaway	12	15
Pike	7	8
Portage	25	26
Preble	15	13
Putnam	25	24
Richland	63	60
Ross	43	42
Sandusky	37	25
Scioto	71	64
Seneca	37	32
Shelby	20	19
Stark	209	184
Summit	308	246
Trumbull	55	50
Tuscarawas	53	45
Union	15	14
Van Wert	22	19
Vinton	3	3
Warren	19	15
Washington	39	28
Wayne	42	39
Williams	19	16
Wood	38	34
Wyandot	9	8
Totals	5943	5092

Dr. Lenhart Elected President of Cleveland Medical Library Association

Dr. Carl H. Lenhart, professor of surgery and head of the department in Western Reserve University School of Medicine, was elected president of the Cleveland Medical Library Association at its annual meeting, January 21, 1938. This honor came to Dr. Lenhart in recognition of 18 years of service as directing librarian, during which time under his management the total number of volumes in the library had been more than doubled.



Dr. Lenhart

A large group of members and guests listened to violin selections by the well-known violinist, Dr. Jerome Gross, a member of the Association, accompanied at the piano by Mr. Leon Machan.

The principal address of the evening, delivered by Dr. Jonathan Forman of Columbus, Editor of *The Ohio State Medical Journal*, described events and personalities in the early medical history of the state, and the establishment of the Starling Medical College at Columbus.

The report of the board of trustees given by the chairman, Dr. Clyde L. Cummer, showed that the association, in addition to owning the monumental Allen Memorial Library building on Euclid Avenue across from Severance Hall, adjoining the campus of Western Reserve University, had real estate, endowments, and other assets amounting to approximately $400,000; that there were 52,000 volumes on the shelves; and that the library subscribed to 434 medical periodicals in many languages. The great usefulness to the public was made evident by the registration figures, which showed that during the year there were 10,000 visits from readers, of whom only 3,000 were from members, the others being students or the general public.

A portrait of the last president, the late Dr. Alfred A. Jenkins, painted by Mr. Rolf Stoll, and showing Dr. Jenkins in the crimson and gold gown of his office, was presented on behalf of the family. Announcement was made that before his death, in November, Dr. Jenkins had created an endowment for the association of $1,000, and also that a bequest of $5,000 had been received from the estate of Dr. Roger G. Perkins.

Drs. Cummer, H. N. Cole, Theodore Miller, E. P. McNamee, John Stephan, and H. R. Trattner were made trustees. In addition to Dr. Lenhart, the officers elected were: Dr. Charles W. Stone, chairman of the board of trustees, Dr. Harry D. Piercy, secretary, Dr. Cole, treasurer; and the following directors of departments, Dr. F. S. Gibson, finance, Dr. E. H. Cushing, library, Dr. R. S. Dinsmore, maintenance, Dr. H. W. Dittrick, museum, Dr. H. V. Paryzek, membership, Dr. D. M. Glover, program, and Dr. Cummer, publications.

PROGRAM FOR 1938 ANNUAL MEETING

Complete program for the 1938 Annual Meeting of the Ohio State Medical Association, May 11 and 12, Neil House, Columbus, will be published in the April 1, 1938, issue of *The Ohio State Medical Journal*. Don't miss reading that issue. You'll agree that no member can afford to miss the splendid postgraduate program which has been arranged for all members.

Don't Forget the Postcollegiate Clinic Assembly at Ohio State, March 3-5

The 104th anniversary of the founding of Willoughby Medical College will be celebrated by the faculty of the Ohio State University College of Medicine with the presentation of the annual Postcollegiate Clinic Assembly at Columbus, Thursday, Friday and Saturday, March 3, 4 and 5. All physicians are cordially invited. Short practical talks will be given by 125 members of the faculty and staff during the sessions. Guest speakers include: Dr. Gatewood, Chicago, associate clinical professor of surgery, Rush Medical College; Dr. James C. Sargent, Milwaukee, president of the Wisconsin State Medical Society; Dr. Karl A. Menninger, Topeka, Kansas, and Dr. John Rauschkolb, Cleveland.

Complete details concerning the program, including names of speakers and topics, were published in the February, 1938, issue of *The Ohio State Medical Journal*, pages 204-207.

Meeting of Second Councilor District Will Be Held at Dayton, March 30

Plans are being made for a meeting of the Second Councilor District of the Ohio State Medical Association at Dayton, Wednesday, March 30. Complete details concerning the program will be sent to all physicians in the district, by the Councilor, Dr. D. W. Hogue, Springfield.

MADE YOUR HOTEL RESERVATION FOR 1938 ANNUAL MEETING? IF NOT, IT WOULD BE ADVISABLE TO DO SO IMMEDIATELY

IF you are planning to attend the Ninety-Second Annual Meeting of the Ohio State Medical Association at the Neil House, Columbus, Wednesday and Thursday, May 11 and 12, don't delay any longer making a request for hotel reservations.

The best-attended state meetings in the past have been in Columbus. Indications are that the 1938 meeting will break all previous records.

While Columbus has many fine hotels, conveniently located, the surest way to get proper accommodations is to glance over the appended list of hotels and their rates, make a selection and send in your request for reservations **immediately**, on the blank provided, **directly to the manager of the hotel selected.**

NAME AND LOCATION	No. of Rooms	Single	Double	Double Twin Beds	Suites
NEIL HOUSE (Headquarters Hotel) 35 South High St.	665	$3.00–5.00	$4.50–6.00	$5.00–7.00	$7.00 and up
DESHLER-WALLICK Broad and High Sts.	1000	3.00–7.00	4.50–10.00	5.00–10.00	8.00 to 18.00
FORT HAYES 31 W. Spring St.	350	2.00–3.50	3.50–6.00	4.00–8.00	7.00 to 18.00
CHITTENDEN High and Spring Sts.	275	2.00–3.00	3.00–4.00	3.50–6.00	
SENECA 361 E. Broad St.	250	2.00	3.00 and up	4.50–6.00	5.00 and up
SOUTHERN High and Main Sts.	250	2.00–3.00	3.00–4.00	4.00–4.50	
VIRGINIA Third and Gay Sts.	150	2.00 and up	3.00 and up	4.00 and up	5.00 and up
BROAD-LINCOLN 631 E. Broad St.	140	2.00 and up	3.00 and up	4.50 and up	3.50 and up

HOTEL RESERVATION BLANK

Mail this coupon to hotel selected

Manager _____ Hotel, Columbus, Ohio.

You are requested to reserve the following accommodations during the period of the Annual Meeting of the Ohio State Medical Association, May 11-12, 1938, or for such other period as may be indicated herein.

☐ Single Room with bath ☐ Double Room with bath Price: _____

☐ Twin Bed Room with bath ☐ Suite

Arriving May _____ at _____ A.M. _____ P.M.

PLEASE VERIFY MY RESERVATION.

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AMENDMENTS TO STATE ASSOCIATION BY-LAWS, PROPOSED BY THE COUNCIL FOR ACTION BY THE HOUSE OF DELEGATES IN MAY

AT a meeting of The Council of the Ohio State Medical Association on February 6, 1938, it was voted to submit a series of proposed amendments to certain sections of the By-Laws of the State Association to the House of Delegates when it convenes at the time of the 1938 Annual Meeting in Columbus, May 11 and 12.

In compliance with the By-Laws, the proposed amendments are being published in *The Journal* in advance of their submission to the House of Delegates.

The purpose of The Council in recommending amendments to Section 3, Chapter 2, and Sections 1, 2 and 6 of Chapter 9 of the By-Laws is two-fold:

First, to bring those sections into conformity with the official action of The Council in ordering discontinuance of the Medical Defense Plan, as of June 15, 1937, and to clarify the wording of the sections in the light of that action. (See June, 1937, issue, *The Journal*, page 655, for action of The Council.)

Second, to re-define the activities of the State Association with respect to malpractice questions and to provide more efficient machinery for handling judicial questions and those involving disciplinary actions.

In effect, the proposed amendments (1) change the title of the present Committee on Medical Defense, to "Judicial and Professional Relations Committee" and increase the size of the committee; (2) assign to the new committee all activities of the Committee on Medical Defense not in conflict with official rulings of the American Bar Association on the former Medical Defense Plan; and (3) provide certain new activities through which the new committee would assist The Council on judicial questions and questions arising through actions of component societies in disciplining members.

Following are the sections as they would read if amended (printed in blackface type) and the same sections as they read at present (printed in lightface type):

Chapter 2

(NEW)

Sec. 3. Arrears in Membership. A member of this Association shall be deemed delinquent and in arrears in all his relationships as a member from and during the period extending from January 1st of the current year until his dues and assessments shall have been received at the headquarters of this Association, having been remitted by the designated officer of the component society of which he is a member.

(OLD)

Sec. 3. Arrears in Membership. A member of this Association shall be deemed delinquent and in arrears in all his relationships as a member, including his rights to medical defense, from and during the period extending from January 1st of the current year until his dues and assessments shall have been received at the headquarters of this Association, having been remitted by the designated officer of the component society of which he is a member.

Chapter 9

(NEW)

STANDING COMMITTEES

Sec. 1. Titles of Committees. The standing committees of this Association shall be the following:

1. **Committee on Public Relations and Economics.**
2. **Committee on Scientific Work.**
3. **Committee on Education.**
4. **Judicial and Professional Relations Committee.**

(OLD)

Section 1. Titles of Committees. The standing committees of this Association shall be the following:

1. Committee on Public Relations and Economics.
2. Committee on Scientific Work.
3. Committee on Education.
4. Committee on Medical Defense.

Chapter 9

(NEW)

Sec. 2. Method of Appointment. The standing committees shall be appointed by the President with the approval of the House of Delegates. The President shall designate the chairman of each committee from among its members. One member shall be appointed to each of the following standing committees each year, for a term of five years: Committee on Public Relations and Economics, Committee on Scientific Work, Committee on Education, and Judicial and Professional Relations Committee. Provided, that at the 1938 Annual Meeting, members of the Judicial and Professional Relations Committee shall

be appointed for terms of one, two, three, four and five years, respectively.

(OLD)

Sec. 2. Method of Appointment. The standing committees shall be appointed by the President with the approval of the House of Delegates. The President shall designate the chairman of each committee from among its members. One member shall be appointed to each of the following standing committees each year, for a term of five years, provided, however, that at the 1936 meeting, five members shall be appointed to serve for terms of one, two, three, four and five years, respectively: Committee on Public Relations and Economics, Committee on Scientific Work, and Committee on Education. The Committee on Medical Defense shall consist of three members, one of whom shall be appointed each year for a term of three years.

Chapter 9

(NEW)

Sec. 6. Judicial and Professional Relations Committee. The Judicial and Professional Relations Committee shall consist of five members. It shall have the following duties:

(1) To investigate, at the request of The Council, questions and controversies arising under this Constitution and By-Laws and under the Principles of Medical Ethics of the American Medical Association and to serve as a board of review with respect to proposed amendments to the constitution and by-laws of a component society of this Association, submitting recommendations for the advice and guidance of The Council.

(2) To examine evidence submitted by a member who is sued or threatened with suit for alleged malpractice and advise him concerning the medical aspects of the case. The committee may inform such member as to the names of competent medical expert witnesses and may advise with the legal counsel of such member as to the medical aspects of the case; but the committee shall not furnish a member with legal counsel. With the approval of The Council, the committee may retain counsel to appear as amicus curiae on behalf of this Association in cases which may be pending in the courts where, in the opinion of the committee, the legal questions involved are of general interest to the members of this Association.

(3) To disseminate information relative to the causes of malpractice suits and methods of prevention to the members of this Association.

(OLD)

Sec. 6. Committee on Medical Defense. The Committee on Medical Defense shall consist of three members. This committee shall prepare plans and establish rules for the defense of members of this Association against whom suits for civil malpractice have been brought. It shall assist in the defense of any member who is in good standing when sued for civil malpractice if the member was in good standing and had complied with the rules of the committee when the service, on account of which suit was brought, was rendered, as well as when the alleged cause of action arose. There shall be one member elected or appointed annually by each component society to serve as auxiliary to said committee.

INCOME TAX DEADLINE

March 15 is the final date for filing Federal Income Tax Returns for year 1937, and for payment of the first quarterly payment of the tax, with the District Collector of Internal Revenue. Advice concerning the filing of income and other tax returns was published in the February, 1938, issue, The Ohio State Medical Journal, pages 190-195.

Occupational Disease Survey

The State Department of Health, with the cooperation of the U. S. Public Health Service, is conducting a survey of Ohio industries, for the purpose of obtaining information concerning the conditions associated with the various occupations which may have an effect upon the health of employed workmen. According to the *Ohio Health News*, the findings will be used to appraise occupational disease problems and "to construct a permanent industrial health service in Ohio". The survey is being directed by the Bureau of Occupational Diseases, assisted by personnel especially selected for the project.

Dinner Honoring Dr. Blickensderfer

Members of the Tuscarawas County Medical Society honored Dr. Joseph Blickensderfer, New Philadelphia for his 50 years of service as a physician, with a testimonial dinner at the Hotel Reeves, New Philadelphia, Friday evening, January 14. Dr. E. C. Davis and Dr. David H. Allen, Dover, were the hosts. Speakers included: Dr. M. W. Everhard, New Philadelphia; Dr. D. W. Shumaker, Dover; Dr. Mary Elizabeth Rowlands, Gnadenhutten; Dr. J. A. McCollum, Uhrichsville, and Dr. Blickensderfer. Still engaged in active practice, Dr. Blickensderfer is a former secretary of the Tuscarawas County Medical Society and is serving his 19th year as health commissioner of New Philadelphia.

Program for the Northern Tri-State Meeting, Findlay, on April 12

The annual meeting of The Northern Tri-State Medical Association, composed of physicians of Ohio, Indiana and Michigan, will be held at the Elks' Home, Findlay, Tuesday, April 12.

The following program has been arranged:

Morning Session

8:00 to 8:45—Dr. H. H. Cummings, Ann Arbor, Mich., "Treatment of Fibromyoma of the Uterus".

8:45 to 9:30—Dr. Warren H. Cole, professor of surgery, University of Illinois College of Medicine, Chicago, Ill., "Hyperthyroidism".

9:30 to 10:15—Dr. Douglas Donald, associate professor of clinical medicine, Wayne University College of Medicine, Detroit, Mich., "Pain in the Cardiac Area Not Due to Coronary Disease".

10:15 to 11:00—Dr. Chas. A. Doan, professor of medicine, Ohio State University College of Medicine, Columbus, "The Myelophthisic Anemias".

11:00 to 11:45—Dr. Max Thorek, Chicago, Ill., "Electrosurgical Obliteration of the Gall Bladder".

Afternoon Session

1:00 to 1:45—Dr. Irving S. Cutter, dean, Northwestern University Medical School, Chicago, Ill., "Therapeutics of Later Years of Life".

1:45 to 2:30—Dr. Daniel J. Davies, associate professor of obstetrics, University of Cincinnati College of Medicine, Cincinnati, "Hemorrhage in Pregnancy and Labor".

2:30 to 3:15—Dr. B. H. Nichols, Cleveland Clinic, Cleveland, "Evaluation of X-ray Findings in Diseases of the Stomach and Gall Bladder".

3:15 to 3:30—Business Meeting

3:30 to 4:15—Dr. Gilbert J. Thomas, president, American Urological Association, Minneapolis, Minn., "Infections Other than Tuberculosis of the Urinary Tract: Diagnosis and Treatment".

4:15 to 5:00—Dr. J. S. Speed, professor of orthopedics, University of Tennessee College of Medicine, Memphis, Tenn., "Central Fractures of the Neck of the Femur".

6:00 to 7:00—Banquet

Evening Session

7:00 to 8:00—Dr. Max Cutler, Michael Reese Hospital, Chicago, Ill., "Indications and Limitations of Radiation in the Treatment of Cancer".

8:00 to 9:00—Dr. Alan Brown, professor of pediatrics, University of Toronto, Faculty of Medicine, Canadian Government, Consultant for Quintuplets, "A Consideration of Some Common Disturbances in Children Frequently Incorrectly Handled".

Officers of the Association are: Dr. G. E. Jones, Lima, president; Dr. J. N. Kelly, La Porte, Indiana, vice-president; Dr. Robert H. Elrod, Toledo, secretary, and Dr. D. R. Brasie, Flint, Michigan, treasurer. Dr. B. F. Mowry, Findlay, president of the Hancock County Medical Society, is chairman of the local committee on arrangements.

Part of Poor Relief Program Vetoed; New Proposals Now Pending

The financing provisions of the poor relief program enacted by the 92nd Ohio General Assembly late in January (*The Ohio State Medical Journal*, February, 1938, issue, page 203) were approved by the Governor, but House Bills 739 and 740, providing for setting up and financing the administrative machinery for the distribution of state funds for poor relief, were vetoed.

The Governor opposed the requirement that prospective relief clients must file notification of intention to become citizens of the United States, if at present they are alien residents; expressed opposition to the establishment of a Board of Appeals, consisting of the Attorney General, State Auditor and State Superintendent of the Budget; and voiced criticism of the requirement for monthly publication of relief expenditures. In criticising the latter provision, the Governor interpreted it as requiring the publication of the names of relief clients, although it was the intention of the drafters of the bill that this particular clause would provide for the publication of expenditures, comparative case loads, etc., so that the citizens in each community might know from time to time of the increases and decreases in relief expenditures and the reasons for them. The Governor also stated that he was not sure a State Relief Director was needed, although he would not oppose such a provision if the Legislature felt it was necessary.

When the General Assembly re-convened February 8, two new relief bills were introduced in the House, H.B. 825 and 826, from which the provisions objectionable to the Governor are purported to be eliminated. Definition of direct relief in the proposed legislation includes "medical service wherever rendered and emergency dental services." As *The Journal* goes to press, these measures are pending before the House. By joint resolution, the Senate and House had agreed to adjourn sine die February 28. Proponents of the relief bills are hoping to have them enacted before the General Assembly adjourns.

OPENING SESSION OF REGIONAL POSTGRADUATE LECTURES AT CHILLICOTHE ATTENDED BY 168; PROGRAMS FOR REMAINING SESSIONS OF COURSE SUMMARIZED

ONE hundred and sixty-eight physicians from 19 counties in Southern and Central Ohio attended the opening session of the Ohio State Medical Association Regional Postgraduate Lectures, Region B, at the Elks' Home, Chillicothe, Thursday evening, February 3.

Dr. A. E. Merkle, Chillicothe, secretary of the Ross County Medical Society, and general chairman of the Regional Committee on Arrangements, presided. Dr. John B. Alcorn, Columbus, President of the Ohio State Medical Association, brought the greetings of the Association, and urged regular attendance at the postgraduate lectures. Those present were invited by Dr. Clyde L. Cummer, Cleveland, chairman of the Committee on Education, to send the committee their suggestions and criticisms concerning the project. He stated that the committee was very eager to give the physicians throughout the state the type of lectures they wanted.

Other officials of the State Association who attended the initial session were: Dr. H. M. Platter, Columbus, Secretary of the State Medical Board, former president, and member of the Committee on Public Relations and Economics; Dr. Russel G. Means, Columbus, member of the Committee on Education; Dr. Louis N. Jentgen, Columbus, member of the Sub-Committee on Regional Postgraduate Lectures; Dr. I. P. Seiler, Piketon, Councilor of the Ninth District; Dr. C. C. Sherburne, Councilor of the Tenth District; Dr. Jonathan Forman, Columbus, editor, *The Ohio State Medical Journal;* Charles S. Nelson and George H. Saville, Columbus, executive secretary and assistant executive secretary of the State Association.

SCOTT AND BARNEY, LECTURERS

Lecturers were Dr. Roy W. Scott, Cleveland, professor of clinical medicine, Western Reserve University School of Medicine, who spoke on "Arteriosclerosis", and Dr. Robert E. Barney, Cleveland, head of the department of dermatology and syphilology, St. Luke's Hospital, who discussed "Diagnosis and Treatment of Early Syphilis". Prepared to appeal to physicians in general practice, the talks were practical and very favorably received.

"Pneumonia", was the subject presented by Dr. M. A. Blankenhorn, professor of medicine, University of Cincinnati College of Medicine, at the second session of the series, February 17. The second lecture on that evening was on "Diabetes", by Dr. Cecil Striker, Cincinnati, chairman of the Council on Diabetes of the Cincinnati Public Health Federation. One hundred and eighty physicians registered at this session.

THOSE WHO ATTENDED

Physicians who registered at the opening session at Chillicothe on February 3, were:

E. Hemmeger, Adelphi; M. H. Mitchell, E. I. Stanley, Albany; G. R. Gardner, R. S. Hosler, Ashville; John R. Sprague, Athens; W. L. McCaleb, Beaver; O. W. Jepsen, Canal Winchester; A. A. Brown, Carroll.

R. C. Bane, R. E. Bower, Walter C. Breth, Frank Brown, H. R. Brown, Melvin M. Christian, M. D. Clayton, Richard L. Counts, Harold Crumley, E. D. Engelman, Melvin F. Eyerman, Harold F. Ford, John W. Franklin, L. T. Franklin, H. E. Harman, L. E. Hoyt, O. L. Iden, C. R. Jackson, H. M. Janney, V. H. Kemper, C. D. Leggett, J. W. Maxwell, Wm. Scott McKeil, Thos. G. McLin, John C. Montgomery, Dennis J. Murphy, Geo. S. Mytinger, Glen Nisley, F. W. Nusbaum, David A. Perrin, E. C. Robbins, M. D. Scholl, L. H. Senteff, W. M. Steele, Joseph G. Tirico, P. E. Woodruff, Chillicothe.

D. V. Courtright, H. D. Jackson, Lloyd Jonnes, V. D. Kerns, Circleville; Geo. W. Cooper, Clarksburg; Clyde L. Cummer, Cleveland.

John B. Alcorn, W. B. Andrus, H. M. Clodfelter, Joseph M. Dunn, Jonathan Forman, J. J. Hughes, H. M. Hunter, L. N. Jentgen, W. P. Johnson, E. M. Kilpatrick, Russel G. Means, H. M. Platter, R. G. Plummer, J. A. Riebel, Wm. H. B. Roche, R. A. Rogers, C. C. Sherburne, Beecher L. Smith, Ralph B. Taylor, Frank Warner, Columbus.

William Garrett, L. M. Tinker, Frankfort; Leo C. Bean, G. A. Mack, Homer B. Thomas, Gallipolis; O. V. Donaldson, Gore; W. H. Ambrose, Walter Felson, J. B. Glenn, W. H. Wilson, Greenfield J. H. Frame, Highland; J. C. Bohl, W. M. Hoyt, J. C. Larkin, J. D. McBride, R. W. Pratt, W. B. Roads, Hillsboro; Wm. A. French, W. F. Marting, Ironton; W. R. Evans, C. C. Fitzpatrick, J. J. McClung, G. A. Parry, W. B. Taylor, Jackson.

Geo. O. Beery, Carl Brown, N. R. Embrey, C. H. Hamilton, A. M. Kelley, M. E. Nichols, Wilford D. Nusbaum, H. R. Plum, Lancaster; C. T. Grattidge, Laurelville; H. H. Lowe, Leesburg; J. S. Cherrington, M. H. Cherrington, A. A. Cole, W. B. Lacock, A. K. Smith, Logan; Ovid O. Burt, Londonderry; J. M. Coleman, Loveland; J. R. Hilling, Lucasville; C. C. Cropper, Lynchburg; H. D. Chamberlain, McArthur; F. M. Cluff, Middleport.

E. A. Person, Murray City; J. L. Webb, Nelsonville; Harry M. Butler, Newark; Geo. D. Blume, New Boston; L. H. Fullerton, New Vienna; Allan B. Rapp, Owensville; I. P. Seiler, Piketon; A. V. Lerch, Pleasantville; Robert R. Boice, Pomeroy.

Chester H. Allen, C. G. Braunlin, W. A. Braunlin, C. L. Ferguson, Clyde M. Fitch, J. W. Fitch, A. P. Hunt, H. M. Keil, J. P. McAfee, Gilbert Micklethwaite, Oscar R. Micklethwait, W. D.

Micklethwait, Marvin P. Moore, Wm. A. Quinn, Harry F. Rapp, J. S. Rardin, Wm. E. Scaggs, W. M. Singleton, Oral D. Tatje, J. Widrich, Portsmouth.

P. A. Jividen, Rutland; R. R. Remark, Sinking Spring; E. J. Tulleys, South Salem; L. B. Hatch, South Webster; C. P. Swett, Sugar Grove; H. W. Chaney, Sugartree Ridge; Paul S. Craig, Don C. Gaskins, J. M. Harsha, James F. Wilson, A. D. Woodmansee, Washington C. H.; R. M. Andre, A. M. Shrader, L. E. Wills, Waverly; J. L. Frazer, Wellston; Hazel Sproull, O. T. Sproull, West Union; Fred H. Weber, Mary J. Weber, Worthington.

C. G. Faue, Minneapolis, Minnesota; Philip Greenfield, New York.

PROGRAMS FOR COMING SESSIONS

The program for the remainder of the course follows:

March 3—"Intestinal Obstruction", by Dr. John F. Beachler, Piqua. "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by Dr. James B. Nelson, Youngstown.

March 17—"Tuberculosis in Infancy", by Dr. Edward A. Wagner, Cincinnati. "Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. James G. Kramer, Akron.

March 31—"Common Psychoses", by Dr. Charles W. Stone, Cleveland. "Cancer of the Breast", by Dr. Edward J. McCormick, Toledo.

April 14—"Prenatal and Postnatal Care", by Dr. Walter W. Brand, Toledo. "Infections of the Urinary Tract", by Dr. Thomas P. Shupe, Cleveland.

April 28—"Angina Pectoris and Coronary Thrombosis", by Dr. Frank C. Clifford, Toledo. "Fungous and Pyogenic Infections of the Skin", by Dr. Howard J. Parkhurst, M.D., Toledo.

May 19—"Arthritis: Medical Aspects", by Dr. H. B. Weiss, Cincinnati. "Arthritis: Orthopedic Aspects", by Dr. Joseph A. Freiberg, Cincinnati.

All meetings will be held at the Elks' Home, Chillicothe, and will start at 7:00 P. M.

Health Officers Meet

Health problems were discussed at a meeting of the Northwestern Ohio Federation of Public Health Officials at Findlay, January 25. The meeting was attended by 56 health commissioners, nurses and sanitarians representing 12 of the 21 counties in the district. Speakers included: Dr. F. E. Mahla, assistant state director of health; Dr. Ernest E. Huber, United States Public Health Service; Dr. Arthur W. Thomas, chief, Bureau of Child Hygiene, and S. Gertrude Bush, chief, Division of Nursing, State Department of Health. Dr. M. C. Hanson, Toledo health commissioner, was elected chairman of the group and Dr. T. W. Mahoney, health commissioner of Lucas County, was named secretary.

Fine Program on Industrial Injuries Given at Sixth District Meeting

A fine program was presented at a joint meeting of the Sixth Councilor District of the Ohio State Medical Association and the Mahoning County Medical Society, at the American Legion Hall, Youngstown, Wednesday afternoon and evening, February 16.

A symposium on "Industrial Accidents and Diseases" was arranged by the District Society. Speakers at the afternoon session were: Dr. H. V. Sharp, Akron, "Hand Infections"; Dr. A. R. Olmstead, Canton, "Finger Injuries"; Dr. R. T. Allison, Akron, "Burns"; Dr. J. L. Fisher, Youngstown, "Skin Grafting"; Dr. T. L. Parry, Akron, "Injuries of the Eye"; Dr. S. W. Hartzell, Youngstown, "Slit Lamp Examination of Eye"; Dr. D. C. Brennan, Akron, "The Bad Heart in Industry"; Dr. K. E. Liber, Canton, "Tendon and Nerve Repairs"; Dr. B. M. Bowman, Youngstown, "Injuries to Uretha and Bladder", and Dr. A. B. Davis, Akron, "Back Pain".

Following dinner, the symposium was concluded with the following talks: Dr. W. A. Hoyt, Akron, "Injuries to the Shoulder"; Dr. F. B. Roberts, Akron, "Injuries to the Knee"; Dr. E. C. Baker, Youngstown, "Trauma to the Lung", and Dr. P. H. Kennedy, Youngstown, "Heat Cramps".

The evening program presented by the Mahoning County Medical Society, devoted to "Fractures", was as follows: "Dr. R. R. Morrall, "Remarks on the Treatment of Fractures"; Dr. C. F. Lowendorf, "Treatment of Fractures of Neck of the Femur"; Dr. T. K. Golden, "Treatment of Compression Fractures of the Vertebrae"; Dr. W. D. McElroy, "Treatment of Fracture Dislocation of the Ankle", and Dr. J. R. Buchanan, "Treatment of Delayed Union by Drilling of the Fragments".

Arrangements for the meeting were in charge of the officers of the Sixth District of the Ohio State Medical Association, Dr. Wm. M. Skipp, Youngstown, Councilor; Dr. W. A. McConkey, Canton, president; and Dr. John M. Van Dyke, Canton, secretary; and Dr. Claude B. Norris and Dr. R. B. Poling, Youngstown, president and secretary respectively of the Mahoning County Medical Society.

Youngstown Postgraduate Assembly

The Eleventh Annual Postgraduate Assembly of the Mahoning County Medical Society will be held at the Hotel Ohio, Youngstown, Thursday, April 28. An all-day scientific program will be presented by a group from the Lahey Clinic, Boston, Mass. Registration fee, including luncheon and dinner, is $5. Out-of-town physicians are cordially invited. Dr. James B. Birch is chairman of the committee in charge of arrangements.

Do You Know - - -

Cases of measles reported to the Division of Communicable Diseases, State Department of Health, February 1 to 15, 1938, totaled 3,411 as compared with 115 during the same period in 1937.

* * *

Dr. A. L. Van Horn, formerly chief of the Bureau of Child Hygiene, State Department of Health, and later regional medical consultant on the staff of the U. S. Children's Bureau, has been appointed assistant director of the crippled children's division of the Bureau.

* * *

Pneumonia serum has been made available for indigent patients in Dayton through funds supplied by the local Community Chest.

* * *

Amateur radio stations in Ohio include the following operated by physicians: W8ALU—Dr. James A. Carnes, Massillon; W8NK—Dr. Sherwood A. Chamberlain, Cincinnati; and W8QOK—Dr. F. Blair Webster, Bellefontaine.

* * *

The first partial report of the Delinquent Tax Commission of the Ohio Legislature reveals the following tax delinquency in Ohio at the end of the 1936 collection period: Real estate taxes, $113,235,820; special assessments, $80,793,655; tangible personal property, $12,414,447 and intangible personal property, $1,434,975. Total—$207,878,897. The total of real estate and special assessment delinquency in Cuyahoga County was $87,276,584—more than 50 per cent of the total for the entire state.

* * *

Practically three-quarters of the 21,888 physicians licensed to practice medicine in New York State have applied for and received authorization to practice in workmen's compensation cases. Under an amendment to the compensation law which became effective July 1, 1935, physicians must apply to the State Labor Department for authorization to practice in compensation cases.

* * *

Thirty-five year old Dr. Currier McEwen, recently appointed dean of the College of Medicine of New York University, is the youngest medical college dean in the nation.

* * *

The French Government recently conferred upon Dr. André Crotti, Columbus, the decoration of the Chevalier of the Legion of Honor, for an exhibition of research work in goitre fungus which was shown at the World's Fair in Paris last summer.

Nearly $45,000 in gifts to the University of Cincinnati College of Medicine was reported by President Walters at a recent meeting of the Board of Directors. Included was a grant of $37,500 from the Rockefeller Foundation for research under Dr. Tom D. Spies in neurology in relation to nutrition, over a five-year period, beginning immediately.

* * *

Efforts of Colorado chiropractors to place a constitutional amendment on the ballot of that state next November have been temporarily thwarted by the Secretary of State who ruled that only 35,499 of the 58,014 signatures which appeared on the petitions were valid. Under the law, 37,417 signatures were needed to initiate the amendment.

* * *

In the first 500 examinations under the new prenuptial physical examination law in Michigan, nine positive cases of syphilis were uncovered.

* * *

It costs the Federal Government $900,000 per year for treatment of men in the ranks of the C.C.C. for venereal infections, according to *California and Western Medicine.*

* * *

An effort is being made to place a "Public Health Liability Act" on the state election ballot in California in 1938. The proposed law, among other things, would make an error in judgment in diagnosis a crime; would make physicians guarantors of cures; would make patients' records public documents, and would hold hospitals (including charitable hospitals) and their nurses liable for the acts of physicians using such hospitals.

* * *

R. R. Rosell has been appointed executive secretary of the Minnesota State Medical Association, succeeding Dr. E. A. Meyerding, who served 13 years in that capacity.

* * *

A recent investigation of 7,511 relief cases in Cleveland resulted in a recommendation from examiners that 23 per cent of the cases be dropped from the relief rolls as ineligible. According to the press, 16 per cent were "definite chiselers"; "clients" who have been receiving relief checks regularly and cashing them, but whose whereabouts was unknown totaled 7 per cent.

* * *

Dr. Malcolm O. Cook, Hamilton, was elected president of the First Councilor District of the Ohio State Medical Association at its recent meeting in Hamilton.

A. O. A. Lecture By Menninger One Feature of Postcollegiate Assembly

One of the features of the Postcollegiate Clinic Assembly of the College of Medicine, Ohio State University, March 3, 4, and 5, Columbus, will be the Alpha Omega Alpha lecture by Dr. Karl A. Menninger, Topeka, Kansas, on Friday evening, March 4 at the University Chapel, on "The Scientific Study of Personality". Dr. Menninger was educated at Washburn College, the Universities of Indiana and Wisconsin, and received his medical degree *cum laude* from Harvard in 1917.



KARL A. MENNINGER, M.D.

For some time he worked at the Boston Psychopathic Hospital and assisted in neuropathology at Harvard and Tufts Medical schools. With his father, a brother and other associates he conducts the Menninger Clinic. He is medical director at the Menninger Psychiatric Hospital, the Menninger Sanitarium and the Southard School for unadjusted children, and is a member of the faculties of Washburn College and the University of Kansas Medical School.

He is the author of numerous books. One of his better known ones "The Human Mind" was released in 1930. Last year Dr. Menninger revised it for special purposes and interests of the medical profession. A new book to be released the last week in February is titled "Man Against Himself."

Guest speakers on the program of the 53rd annual Mid-South Postgraduate Medical Assembly at Memphis, Tenn., February 15-18, included Dr. Mont R. Reid and Dr. A. Graeme Mitchell, Cincinnati; and Dr. Russell L. Haden, Cleveland.

Schedule of State Health Department Refresher Courses in Obstetrics and Pediatrics in March, April

Another series of refresher courses in obstetrics and pediatrics for physicians will be presented by the State Department of Health in various parts of the State during March and April. Schedule of the meetings follow:

March 2—Zanesville—8 P.M. Dr. Henry L. Woodward, professor of obstetrics, University of Cincinnati College of Medicine, will speak on "Forceps, Analgesics in Pregnancy, Toxemias of Pregnancy". Muskingum County Academy of Medicine will be host. Members of the following county medical societies also have been invited to the meeting: Licking, Noble, Perry, Guernsey and Morgan. Dr. J. E. McCormick, Zanesville, will preside.

April 6—Xenia—2:30 P.M., at O. S. S. & O. Home. Dinner at 6 P.M. Dr. A. Graeme Mitchell, professor of pediatrics, University of Cincinnati College of Medicine, will speak on "Endocrine Disorders in Children", and Dr. Robert A. Lyon, assistant professor of pediatrics, will discuss "Syphilis in Children". Greene County Medical Society will be host. Members of the Clark, Champaign, Madison and Montgomery County Medical Societies have been invited.

Arrangements are also being made for the following meetings:

April 15—Greenville—3 P.M. Sessions before and after dinner. Dr. Lyon will speak on a pediatric subject.

April 21—Sandusky. Dr. S. H. Ashmun, Dayton, will speak on some subject in the field of pediatrics.

A meeting is being planned for either Medina or Bowling Green on April 20 or 22.

Physicians also are invited by the State Department of Health to attend a dental refresher course, on the subject of pediatric dentistry, at the Hotel Shawnee, Springfield, on March 9, from 2 to 5:30 P.M., with a round-table discussion following dinner at 6 P.M. The speakers will be: LeRoy Johnson, D.D.S., Columbus, and Martha Koehne, Ph.D., nutritionist for the State Department of Health, on the topics, "Dentistry in Children" and "Nutrition in its Relation to Dental Health". Members of the Mad River Dental Society will be hosts. Physicians and dentists in Clark, Champaign, Logan, Madison, Montgomery and Greene coutnies are invited.

Dr. Geneva Shong-Rothemund, pediatrician in the Bureau of Child Hygiene, State Department of Health, is making arrangements for these refresher courses, which are financed by Federal Social Security funds. There is no registration fee.

1938 ANNUAL MEETING AT A GLANCE . . . . .
. . . . . COMPLETE PROGRAM IN APRIL JOURNAL

PROGRAM—Opens Wednesday, May 11, 9:30 A.M.; closes Thursday, May 12, 11 P.M. Has been officially approved by the Council. One of most complete ever arranged for State Association Annual Meeting. Will be published in full in the April 1 issue, *The Ohio State Medical Journal.* Read all of it.

GUEST SPEAKERS—Seven outstanding guest speakers in seven different specialties. Addresses will be especially for physicians in general practice.

GENERAL SESSIONS—Four general sessions, scheduled at times when all can attend. Guest speakers and representatives of Scientific Sections.

SCIENTIFIC SECTION SESSIONS—Each of the six Scientific Sections will hold one session at which a formal program will be presented. One section will hold a round-table luncheon. Five addresses before each section.

SCIENTIFIC EXHIBIT—Between 30 and 40 scientific exhibits will be shown, including slides, charts, graphs, motion pictures, clinical demonstrations and informal lectures. Space available for those who have not arranged to exhibit.

TECHNICAL EXHIBIT—Approximately 50 technical exhibits by firms marketing pharmaceutical and surgical supplies, foods, books, insurance and other products. One of the best technical exhibits ever arranged by the State Association.

ANNUAL BANQUET—Only social event of the meeting will be the Annual Banquet with the Columbus Academy of Medicine as host, on Thursday evening, May 12. Special entertainment.

ENTERTAINMENT FOR WOMEN GUESTS—There will be special social affairs for wives and daughters of physicians and other women guests, arranged by a committee of wives of Columbus physicians.

BUSINESS—The House of Delegates will meet at least twice to transact business, elect officers, confirm committee appointments, pass on resolutions, etc. Every county society should be represented at both sessions.

ACCOMMODATIONS—The entire meeting will be held at the Neil House. Most of the sessions will be held on the Mezzanine Floor, adjacent to the exhibit halls. The compact, but adequate layout, is ideal.

REGISTRATION—Every physician must register and obtain an official badge to attend sessions. Official 1938 State Association membership card must be presented to obtain badge. One big argument why 1938 dues should be paid immediately!

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

U. P. Reporter Says Russian Medicine Anything But Efficient

When Eugene Lyons took an assignment as United Press correspondent in Russia, he was rated as a Soviet sympathizer. Seven years in Red Russia gave him an insight of the country which gradually changed his point of view. In his recently-published book, "Assignment in Utopia", Lyons presents some illuminating and tragic observations about the great experiment.

Part of "Assignment in Utopia" deals with medical practice under Russia's governmental system of medical care. Those who would like to see such a system installed in the United States undoubtedly will not use his reports for their propaganda barrage. He writes:

"We came, unluckily, to know a lot more about Soviet medical practice than most of our colleagues. Like the 'stable' currency and the wonderful educational methods, the socialized medicine under the official statistical surface was a snarl of contradictions, shortages and ineptness. Doctors and dentists regarded their obligatory work for the state as an exaction and depended on private practice for their real income. The more famous medical specialists did not budge for less than fifty or a hundred rubles; often it required 'pull' to get their services at any price. The public health service was by all odds inferior to the free public and charitable health services available to the poor in cities like New York or Chicago."

While in Russia, Mrs. Lyons was compelled to seek hospitalization at Botkinsy Hospital. That it was anything but a pleasant experience is indicated in Lyons' description of the system as it operated in that institution:

"Billy improved rapidly, despite the special care, and was soon well enough to watch the conduct of that hospital by way of sociological diversion. If I had not been there day after day and seen some of the primitive and careless procedure myself, I should have thought the details she told me were the effects of delirium. Only a few of the women were trained nurses—the others were ignorant girls of the servant type. They stomped up and down corridors and banged doors and called for one another in loud voices. Except under unusual circumstances, bed linens were changed once a week. The blankets were not washed but merely disinfected, so that they were crusted with the dirt and vomit of previous patients. The precious rules prohibited the bringing of linens, blankets, or other accessories from outside. But by devious means I smuggled in everything Billy needed, and doctors, nurses, patients came to her ward to inspect and exclaim over the fleecy American blankets; the hospital buzzed with the news of a foreigner who changed her sheets, her nightgown, and even her pillowcases, every day.

"The doctors, Billy thought, were capable but overworked. I succeeded—again by outraging the blessed rules—in having our own physician, who was familiar with her case, treat her. As soon as she could be moved safely she returned home.

"Ever after, the glowing reports of socialized medicine in Russia in American books and magazines have been a source of amusement to us. Always we have wished their authors only one punishment—a week or so as patients in the second-best hospital in Russia."

The greatest folly of which a man is capable is to sit down with slate and pencil to plan out a new social world.—Erasmus.

Let Your Delegate, Your Councilor Know What You Think

Whoever wrote the editorial, "On Politicians", published in the February issue of *The Toledo Academy of Medicine Bulletin*, touched on some vital points in the set-up of organized medicine. The following excerpts furnish the gist of the article:

"Consider a moment the so-called medical politician. There are very few professional ones. But it is not uncommon to hear certain of our professional confreres rather disparagingly referred to as 'medical politicians.' Who are they? For the most part they are the men who carry the brunt of the burden for medical organization. They are the ones who attend to the business, right or wrong, of keeping Medicine organized. They sit in councils, in policy making commissions, they contact legislators, from township trustees to U. S. Senators, in an effort to influence legislation in behalf of Medicine. They are 'that * * * clique which run things.'

"Now this is not being written with any feeling of bitterness. It is all very true. The politicians do try to run things. They have to do so. The crux is, how to impersonalize such leadership. In democratic organizations the politician tries, or should try, to execute the wishes of his constituents, not all, perhaps, but seeking a compromise program that is acceptable to most. If the politician does not do this he is not, of course, fulfilling his purpose. That leads back to a seriously important factor, the constituency. For the sake of expedience the constituency elects representatives, but the fact that it has done so does not absolve it from further responsibility. If it does not know its own mind, if it is unwilling to submit for compromise important, divergent issues, the politician, who must act, cannot be blamed for exercising his personal judgment. On the contrary, if the chosen representatives refuse to carry out a com-

promised and acceptable program, they should be replaced by others who will do so.

"Believe it or not, the true politician wants only to represent. Tying the divergent ends into a beautiful median bow is his fondest hope. The only reason for all this verbosity is to suggest one means by which the tying may be aided—locally, at least—and that is by more open, general meetings of the Academy where matters of medical policy may be freely discussed; where those who have to represent the organization may learn what to represent."

Applying the foregoing observations to the activities of the State Association, we believe that these points stand out:

The House of Delegates is the Association's legislative body. Since every county medical society is entitled to representation, the entire membership has a voice in its proceedings. Nevertheless, there are always some counties unrepresented, either because the county society is not sufficiently interested to insist that its elected delegate attend or the delegate shirks his responsibility. This is a situation which needs correcting.

Like all legislative bodies, the House of Delegates makes an effort to act in accordance with the views and wishes of its constituency—the membership as a whole. This becomes difficult unless the membership through the various component county societies makes known its views. In other words unless the county medical societies devote some time each month to discussions of important questions confronting the profession and members express themselves, officially or unofficially, the elected delegates have little to guide them in making their decisions.

The same points are true with respect to The Council. Members of The Council should have, and welcome, the advice and suggestions of members of their respective districts. Frequently, they find it difficult to get a response to their requests for expressions of attitude and viewpoints.

When county medical societies are asked for information or official action on vital questions, there is a certain number of county societies which respond immediately and lend their assistance. There are a few societies which never "follow through".

It is a fact which can't be laughed off that medical organization can function more smoothly and with more benefit to all members, if those serving in legislative and administrative capacities could learn more about the views and attitude of those they represent—the membership as a whole. It's up to the constituency.

Government is becoming increasingly a matter of facts and figures, maps, graphs and mathematical formulas. Men must govern and be governed by their eyes and intelligence, not by their mouths and viscera.—Read Bain.

Vacation Trip Aboard O.S.M.A. Special Train in June Recommended

Elsewhere in this issue of *The Journal* will be found eight pages of factual and descriptive material concerning the Ohio State Medical Association Special Train to San Francisco where the 1938 session of the American Medical Association will be held, June 13-17.

We recommend that every reader of *The Journal* give the Special Train Supplement more than a casual glance. Those who are planning to attend the A.M.A. meeting shouldn't pass up this excellent method of combining business with pleasure. It will be a real opportunity to take a real vacation at a minimum of expense. Incidentally, the Ohio Special Train itinerary can't be beaten and the total cost is exceptionally low. Because the middle-man commission has been dispensed with, the all-inclusive cost in all probability is much less than that quoted by independent, commercial agencies.

Talk it over with your family and colleagues. Don't let this golden opportunity slip by. Reservations should be sent to Executive Secretary Nelson as soon as possible in order to secure accommodations desired.

The true university of these days is a collection of books, and all education is to teach us how to read.—Carlyle.

Two Big Reasons Why Laboratory Diagnosis Must Not Be Overdone

Even a good thing can be overdone—at least expanded to a point where it becomes out of proportion to its relative importance. This statement may be applied, we believe, to the emphasis now being placed on laboratory diagnosis. We do not mean that the laboratory is not indispensable and of great value. Nevertheless, it cannot and should not be inflated to such a point that it forces clinical diagnosis out of the picture.

The tendency toward over-emphasis in laboratory diagnosis is dangerous for two reasons. The first of these—the economic angle—is well illustrated by the following editorial squib from *The Wisconsin Medical Journal.*

"In Cronin's 'The Citadel,' the main character, during the course of an oral examination to secure a higher degree, is asked to state what impressed him as being most important in his years of practice. His answer is: 'Take nothing for granted.' The truth of this statement as it applies to our individual practice is known to all of us. We speak of that precept in these columns, however, in a different connection; that is, in connection with our tendency on occasion to take certain routine procedures for granted simply because so many other things in the day-to-day

practice of medicine are constantly demanding the best that each of us has to give.

"An instance of this nature was recently called to our attention. In one of our hospitals, all patients were receiving rather extensive laboratory services. The reports of the various examinations made a voluminous record. Yet it was not until one of the staff physicians was brought face to face with a patient's hospital bill that he appreciated how extensive the laboratory services were, their cost to the patient, and the extent to which such services had become a matter of routine for every entrant.

"As a result of discussions, other physicians whose patients were served by this hospital discovered like conditions. Now the staff of the hospital proposes an outline of those essential laboratory services which it feels the hospital should render to its medical patients. A list of laboratory services is also proposed for those who are hospitalized for major surgical conditions; another list of those who come for minor surgical conditions; and still another for obstetrical patients. The staff of the hospital has performed a proper and distinct service to the hospital, and to the patients in it.

"Might we suggest that this subject is one deserving of consideration by every hospital staff,—at least to the point of knowing the exact situation."

The second reason—the importance of equipping the modern physician so that he can depend on his own knowledge and faculties to diagnose, perhaps under circumstances where laboratory aid is not available—is referred to in the following comment from the pen of Dr. Howard Dittrick in *The Cleveland Academy of Medicine Bulletin*:

"In a recent issue of the Plain Dealer Richard Harding in his column 'The By-Product' discussed the contrast between the laboratory and the sick room types of physician. Mr. Harding's comment was based on the observations of Dr. Harvey Cushing, the exact reference not being given.

"There is doubtless some basis for this criticism, originating in Dr. Cushing's experience. Repeated reliance upon the laboratory tends to blunt the keen flare for independent diagnosis. Yet masters among clinical teachers study the illness of each patient as a unique and intriguing challenge. The more obscure the clinical picture the more acute becomes their every faculty working toward a correct diagnosis to be checked thereafter by proper tests. We have all seen instances when laboratory tests were not sufficiently conclusive to confirm the diagnosis which nevertheless eventually proved correct.

"Those who have really learned to perceive through carefully trained sensory organs—eyes, ears, nose or hands—may lose that ability and younger men may never attain it, if the fullest exercise is not given to those faculties invariably at their service in any emergency.

"To underestimate the value of the laboratory would be absurd. To be helpless when it is not immediately available would be tragic. Only unremitting exercise of every faculty develops precision. First commit yourself to a diagnosis and then check by means of the laboratory."

Even a Few Simple Dots Can Make a Whale of a Difference

Out of the mass of propaganda, charges and counter-charges which has grown out of the establishment of Group Health Association, Inc., a medical service scheme, by the Home Owners' Loan Corporation and Home Bank Board at Washington, D.C., two things of special interest have bobbed up:

Proponents of state and socialized medicine have left nothing undone in an effort to ballyhoo this objectionable venture of the Federal Government into the practice of medicine and use it as a wedge for similar schemes.

Proponents of Group Health Association, Inc., and similar types of state medicine have gone so far as to misrepresent certain facts in connection with this objectionable scheme of the Federal Government to bolster their propaganda.

Both points are well illustrated in the following comment from the February 12, 1938, issue of *The Journal of the American Medical Association:*

"The cooperative plan for medical service now being promoted under the title of Group Health Association, Inc., among employes of the Home Owners' Loan Corporation in Washington, D. C., is one of the strangest phenomena yet to appear on the medical scene. It has never been demonstrated that such a system, employing a few physicians full time for the medical care of thousands of people, can ever provide a quality of service even approximating in quality the kind of medical service that is today available for wage earners of the same class elsewhere in the country. Nevertheless, in a bulletin issued as a piece of publicity by the Bureau of Cooperative Medicine of the Cooperative League of the United States of America, it is said:

" 'The Legislative Council of the United States Senate this week approved the allocation of $40,000 by the Home Owners' Loan Corporation to assist the Group Health Association, a cooperative health unit for employes of the HOLC. The decision was made at the request of the House Appropriations Committee. After an investigation into the operations of the cooperative health association the council expressed the opinion that the sum was properly expended.

" 'The House Appropriations Committee concurred in the decision but restricted further use of government funds for such purposes without special approval of Congress. Essentially agreeing that some form of cooperative medicine is essential, the Appropriations Committee report stated: Irrespective of the merits of the work proposed to be done . . . the committee is of the opinion that such expenditures should not hereafter be made without express legal authority.' "

"Now whenever you see a little group of dots like that which occurs in the propaganda of the Cooperative League it is well to get the original document and find what was left out. Here is the exact statement submitted by Mr. Woodrum, from the Committee on Appropriations of the House of Reresentatives:

" '*Entirely* irrespective of the merits of the work proposed to be done *under the Group Health*

Association, for which the Home Owners' Loan Corporation recently made a contribution of $40,000, the committee is of the *unanimous* opinion that *the expenditure was one not authorized by the law and that* such expenditures should not hereafter be made without specific legal authority. (Words omitted above are italized.—Ed.'

"It would pay every citizen to read the complete hearings of this question. In those hearings Mr. Dirksen inquired as to whether or not the next step would be for the government to set up grocery stores and meat markets for its employes and Mr. Woodrum asked 'How about a good gymnasium down there or a beauty parlor or a barber shop?' And it should not surprise any one to hear that the representative of the Home Owners' Corporation thought a gymnasium might well be within the functions of that body."

To set out to give the public what it wants, as the saying is, is a dangerous and fallacious policy.—Sir John C. W. Reth, director general, British Broadcasting Corporation.

Doctor Drafts Own Contract for Dealing With Collection Firms

Most physicians who run into grief in their dealings with collection agencies do so because they were unwise enough to sign some screwy contract dropped onto their desk by a salesman and signed without careful analysis. Most collection agency contracts are the bunk, unnecessary and dangerous. If a physician feels that some sort of a contract is necessary, it might be wise for him to follow the plan of a Minnesota physician whose system was commented on in a recent issue of *Minnesota Medicine.*

The Minnesota physician has formulated a contract of his own which he claims he has used with satisfaction. The signing is done by the representative of the collection agency. The form reads somewhat as follows:

IT IS HEREBY AGREED, In the acceptance of the following named account for collection the following named conditions are accepted and will be observed: 1. The ownership of the account at all times rests in the name of Dr. ..... 2. At any time the owner of the account may withdraw the account from collection, subject only to payment for collections made. There shall be no additional charges made against the withdrawn account for attorney's fees, court costs, postal charges, or services rendered by the collection agency. If the withdrawn account be paid within sixty days after withdrawal, it is to be considered paid through the collection agency and subject to the agreed charges for collection. 3. There shall be at all times an effort made to retain for Dr. ..... , the respect, confidence, and goodwill of the debtor. 4. There shall be no legal proceedings undertaken without the owner's written consent. 5. The rate for collection is not to exceed 50 per cent in total charges. 6. A written report of progress, or action taken toward collection on this account shall be rendered quarterly. If, after one year, no progress has been made, the account shall be returned to Dr. ..... , without charge for services, and the account considered dropped.

Name of debtor .....
Address .....
Amount due .....
Date first services rendered .....
Date last services rendered .....
Total amount paid on account .....
Date of last payment .....

RECEIVED of Dr. ..... the above named account subject to the conditions of the agreement.

.....
(Place)
Date.....

SUBSEQUENT DATA.

The same physician uses a second form which he calls a contract for payment which becomes a note if payments are not kept up. No interest is charged if payments are made regularly. The second form reads as follows:

$ ..... (Place and date)
M .....

To Dr. ....., Dr.

To Professional Services Rendered .....
the sum of ..... DOLLARS

I acknowledge the correctness of the above account and agree to pay the same .....
..... , with interest at six per cent upon any unpaid balance after .....

It is also agreed; failure to make payment upon any payment date renders the entire balance due, as of that date, and interest to be reckoned, as from that date.

.....
.....

We are not contending that this is a perfect method of handling accounts. There may be better ones. Nevertheless, it certainly is superior to the schemes offered by many collection agencies —certainly a much safer method and a lot less expensive in the long run.

Criticism that reveals hostility or prejudice is often ineffective.—New England Journal of Medicine.

"Hail, Hail the Gang's All Here!" Even Doctors Must Play Occasionally

Through the years a mythical Hall of Medical Fame has been established by medical journalists in recording the names of physicians whose discoveries are responsible for the advancement of the science and art of medicine. "Wheel - horses" in the work of organized medicine have also been extolled. In our opinion, one group has been neglected. We think there should be a niche in that mythical Hall for those congenial souls who can think of ways for physicians to get together socially once in a while, forget the trials and

tribulations of the practice of medicine, and just have themselves one whale of a good time.

Our first nomination for that honor goes to Dr. Samuel J. Coulter of Toledo.

Seven years ago, Dr. Coulter, a hockey enthusiast, invited a party of 12 local physicians to accompany him to Detroit to see a professional ice hockey match. They had such an enjoyable time that the hockey party became an annual affair under Dr. Coulter's direction, and in the last few years has necessitated a special train to transport the crowd.

On Thursday night, February 10, over 600 Toledo physicians, dentists and their guests (it's a stag affair) made the trip on a 15-car special train, including eight dining cars. Special buses were on deck to transport the excursionists from the station to the Olympia, where they saw the New York Rangers skate rings around the Detroit Red Wings.

All arrangements clicked perfectly, and everybody had a swell time. So we doff our editorial hat to Dr. Coulter, and to physicians in other county societies who have an idea that "it's always fair weather when good fellows get together", and that a good way to keep up the society's esprit de corps is a social session, now and then, devoid of scientific or medico-economic disussions, but just for the specific purpose of having a good time.

There is no serum that has done so much for the public health as printer's ink.—Dr. Kendall Emerson.

You Can Help Us To Increase Advertising Revenue; Will You?

The next time a detail man visits you, ask him if his firm advertises in *The Ohio State Medical Journal*. If it doesn't, ask him: "How come?" We doubt if he can give you a good reason.

There are several mighty good reasons why firms handling medical and surgical products should advertise in *The Journal*. First, their ad reaches the cream of the medical profession each month. Second, an ad in *The Journal* signifies that the merchandise advertised has the approval of the Council on Pharmacy and Chemistry of the A.M.A.—a most desirable and important endorsement. Third, ads in *The Journal* are read—most direct-mail literature is delegated to the wastebasket unopened.

Why should a physician be interested in this question? For several reasons. First, he can be sure that products boosted in ads in *The Journal* are Council-approved items. Second, advertising in *The Journal* gives him authentic information in readable fashion; Third, he can read ads in *The Journal* at his convenience. Fourth, *The Journal* reaches him only once each month and doesn't interfere with his regular first-class mail as does direct-mail advertising. Fifth, advertising revenue helps pay the costs of producing *The Journal*, making it unnecessary (if it is adequate) to charge members a subscription for *The Journal* and making possible the use of a greater proportion of each member's annual dues for other important State Association activities.

Speak to the detail men who call on you about this. If you have the urge, drop a line to firms who are not advertising in *The Ohio State Medical Journal* and suggest they do so. If we can increase advertising revenue, we can give you a still bigger and better journal. Please pull for concerns who do advertise in *The Journal* and help us stimulate interest among those who don't.

By 1990, population experts claim, the aged population will equal the pre-adolescent, which means that the medical profession of that time may have to have a specialty of "geriatrics" as well as pediatrics.

If and When We Have State Medicine; Some Mighty Vital Questions

At the risk of being punched in the nose for dispensing a bit of gloom, we can't resist republishing for the consideration of readers of *The Journal* a letter received by the editor of *California and Western Medicine* from Dr. Harold I. Harris, Hollywood, on the subject, "If and When We Have State Medicine".

Some may say that Dr. Harris has exaggerated and paints a pessimistic picture, but none can say that he has not asked some very pertinent questions and furnished much food for thought, not only among members of the medical profession but among the laity as well. You may not agree with all his answers but you will have to agree with some of them—most of them, as a matter of fact.

His communication read as follows:

"What will be the status of the specialist if and when we have State Medicine? How will the various specialties be classified? How will the men in the different branches be selected, on the basis of years of practice, years of postgraduate work, or by the number and kind of influential political friends, or on the basis of competitive examination, similar to civil service?

"Will postgraduate work be encouraged? If so, will the State pay for it, pay for the time off, similar to army regulation? Who will designate the places to study? Will that be left to the discretion of the individual physician, or will it be controlled by a board? If by a board, will it be composed of doctors or laity?

"What will be the psychological reaction of the mass of the profession toward the compulsory attendance of patients? What will be the stimulus for exhaustive study of puzzling cases?

"Will every section of the human anatomy be

divided for special study, and be under the jurisdiction of a specialist in that part? If so, what will be the result obtained by the narrow specialist in relation to other ailments of the same individual? Will it be necessary to have a dozen specialists in consultation if a patient should complain of symptoms in different parts of the body?

"What will be the inducement to physicians to write scientific articles?

"What will be the relation of physician to patient? What if an illiterate patient decides that the physician attending the case is not competent—will he go to the lay committee to complain, or will he go to some politician friend to have the doctor disqualified, or reduced in rank?

"If State Medicine becomes a practice, can the State stop there? What effect will it have upon the new graduates? Are they to become specialists as soon as they graduate, or must they go out in the field as general practitioners? If as specialists, who will pay for their time and tuition? The hospitals in which they study will have to conform to some degree with the plan, and will they, as a consequence, be supported by the State? What then will become of the private donations to these institutions? If private bequests are withdrawn, will that increase the amount necessary to support the institution to be given by the State, and will that in turn increase the State's budget and in turn increase the taxes?

"If the physician is a State agent, will the medical students attending the State schools be subject to pay the present rate of medical tuition? If cheaper, what will become of the private schools?

"What will become of the various medical societies? What will be their value? Certainly not for medical protection, for if State Medicine comes, that in itself will show that the medical societies are not capable of protecting their interests. Certainly not to protect the lay people against themselves, because that will be too late. Will it be necessary to belong to a medical society to be in good standing? Do State officers, clerks, judges, and various other State employes belong to fraternities in order to be in good standing?

"If there is a change in the political situation, will the general practitioner of today be the specialist of tomorrow? If there are one hundred graduates, and a vacancy for only fifty doctors, what will become of the other fifty? Or will the State regulate the number it will need to be permitted to graduate or enroll? If a physician who is in ill health, or for other reasons needs to or desires to make a change from one state to another, will it be necessary to make a political application, medical application, or wait for a quota, or wait for a vacancy?

"If there exists an old-age law, will the doctor be removed after a certain age, and be placed on a pension? Will a surgeon be replaced at a younger age than a general practitioner?

"Who will be responsible for malpractice suits, the doctor or the State?

"If each physician asked himself each one of the foregoing questions, and made an attempt to answer as he thinks the situation might be, we would have a more concise idea as to the precise effect upon us and the laity if and when we have 'State Medicine.' "

Getting the Other Fellow's Viewpoint Quite Important

Trying to get the other fellow's viewpoint and following as closely as possible the old principle of treating the other fellow the same as you want to be treated, constitute a procedure which, if practiced, would iron out many of the misunderstandings and difficulties which arise between physicians.

This thought is well-expressed in the following comment culled from the editorial columns of a recent issue of *The Columbus Academy of Medicine Bulletin*:

"Fee splitting is always a lively subject for discussion but there are other problems almost as troublesome that beset many of those concerned with the consultant physician relationship.

"First of these is the consultant, who becomes a thorn in the side of referring physicians because he forgets that patients are referred for consultation and proceeds to take them over and attend their treatment with less than a nod for the family physician. The second difficulty originates in the other half of the relationship, with the family physician who refers a patient to a consultant, ostensibly for consultation but actually with a ready-made diagnosis about which he has informed the patient. This puts the consultant in the position of having to confirm the family doctor's diagnosis to spare him embarrassment or of taking exception to it at the risk of losing his good will.

"Putting yourself in the other fellow's shoes, and stopping to think what you are doing, will go far toward remedying this difficulty."

HOTEL RESERVATIONS

For State Association Annual Meeting—Those who have not made hotel reservations in Columbus for May 11 and 12, the time of the 1938 State Association Annual Meeting should do so immediately. Please use the hotel reservation blank published elsewhere in this issue of *The Journal*.

For American Medical Association Meeting—Those planning to attend the A.M.A. meeting at San Francisco, June 13-17, should write for hotel reservations at once. Reservations may be made through Dr. F. C. Warnshuis, 450 Sutter Street, San Francisco.

THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

The Diary of a Surgeon in the Year 1751-52. By John Knyveton. Edited by Ernest Gray. $2.50. D. Appleton-Century Company, 1937; pp. 322.

Ernest Gray, an English surgeon, has produced an ingenious and entertaining fictionalized reconstruction of two years in the life of eighteenth century surgeon. In this way is constructed a satisfactory panorama view of the medicine of the times and an exciting story. It is highly recommended for recreational reading.

A Pediatrician in Search of Mental Hygiene. By Bronson Crothers, M.D., assistant professor of pediatrics, Harvard Medical School. $2.00. The Commonwealth Fund, 1937; pp. 271.

Although anxious, modern parents may consult pediatricians more frequently about questions of behavior, social adjustment, and mental hygiene, the subject is one that concerns every physician, no matter what his work may be. Here is a frank criticism of both physician and mental hygienist written in our own language. No physician therefore can afford to miss reading this little book.

Let's Help the Doctor. By Margaret O'Donovan-Rossa, R.N. $1.50. Washable coated binding. The Devin-Adair Company, New York City, pp. 141.

An unusually well done series of talks on home nursing which many physicians will find helpful in the management of sickness in the home where the untrained loved ones of the patient must do the nursing.

Crippled Children and Orthopedic Nursing. By Earl D. McBride, M.D., assistant professor of orthopedic surgery, University of Oklahoma, and Winifred B. Sink, R.N., educational director, Grace Hospital, Detroit, Michigan. Second Edition, $3.50. The C. V. Mosby Company, St. Louis, 1937; pp. 360.

This edition has been thoroughly revised and reset. The nursing viewpoint has been more adequately presented by the addition of Winifred Sink as co-author. This has simplified the presentation and therefore made the book more useful. Much new material has been added to the chapter on physiotherapy. The authors apparently are determined to see to it that the child is treated as an individual and not merely as an orthopedic problem. The method of presentation also makes the book useful to those interested in the social side of the problem of the crippled child.

Mentality and Homosexuality. By Samuel Kahn, Ph.D., M.D. $3.00. Meador Publishing Company, Boston, Mass., 1937; pp. 249.

While acting as psychiatrist to the Department of Correction of New York City, the author spent much time and effort in the study of homosexuals, both male and female. This study, as others usually have done, arouses sympathy for a class of patients usually scorned as degenerates unworthy of help. He draws the conclusions that these patients are not insane people and in general they are not mental defectives; that they are to be classified as moral defectives and constitutional psychopaths; that the male and female sexual characteristics and, to a lesser extent, also the primary sexual characteristics are disturbed; that the condition has no relation to education; and that there are from 100,000 to 500,000 active or passive homosexuals in New York City. Detailed discussions of Diagnosis, Prognosis and Treatment, including its Prevention, are presented.

Practical Birth Control. By Rita Irwin and Clementia Paolene, M.D. $1.75. Robert M. McBride and Co., New York City, 1937; pp. 172.

Much essential information is presented in this popularly priced book. Unreliable methods, the safety of the "safe period", methods partially reliable, are the titles of consecutive chapters and then much space and detailed instructions are given to the pessary-jelly combination.

Year Book of General Medicine, 1937. By Dr. George F. Dick, Lawrason Brown, George R. Minot, Wm. B. Castle, Wm. D. Stroud and George B. Eusterman. The Year Book Publishers, Chicago, 1937; pp. 832.

An annual review of progress in general medicine of the same high standard which has compelled the editor to depend upon it for these many years to bring him up to date at the end of the calendar year when it is his custom to take an invoice of his professional knowledge.

The Mind of Man. By Walter Bromberg, M.D. Harper & Bros., New York, 1937, 19 plates. pp. 323.

A scholarly and orderly account of man's attempts at conquering mental illness from the time of the ancient magi to Adolph Meyer. Hippocrates, alchemists, Greatstakes, the Irish stroker, the shrine at Gheel, the Witches' Sabbath, Bedlam's beggars, Pinel liberating the insane from the prisons of Paris, Perkins and his magnetic

tractors, Messmer in his self-mystifications, Charcot and his flambouyant clinics on hysteria, Mary Baker Eddy and Christian Science, Wier Mitchell propounding his "rest" cure, Emil Coue chanting his famous couplet—all these pass by in brilliant, historical panorama.

"The dark shadow lifts" according to the writer when the cult of curability and the era of the laboratory enter the scene. Three chapters are devoted to a very clear and restrained exposition of Freud and his psychoanalytic contributions.

Group therapy, child-guidance, emotional retraining, and the diffusion of the mental hygiene movement are endeavors which hold promise of a bright future for psychiatry. The "weak sister of medicine" is slowly coming into its own.—L. J. Karnosh, M.D.

Operative Gynecology. By H. S. Crossen, M.D. and R. J. Crossen, M.D., of the Washington University, St. Louis. Fifth edition, $12.50. The C. V. Mosby Company, St. Louis, 1938; pp. 1076.

Five editions bespeak the confidence of our profession in this work. Over 200 new illustrations have been used in this edition and the whole subject has been brought down to date without deviating from the idea of selective treatment emphasized in the previous editions. The emphasis is therefore placed upon the importance of individual study.

International Clinics, Vol. IV—47th Series—December, 1937; J. B. Lippincott & Co., Philadelphia.

This volume includes 23 clinics by 27 authors from every section of the country.

Spies and Cooper from the Cincinnati General Hospital have an excellent article on "The Diagnosis of Pellagra", which is beautifully illustrated with 30 photographs, four of them in colors. Interesting case reports of virilism and Xanthoma Diabeticorum follow. There are nine articles under the general heading:—A Discussion of Surgical Conditions Within the Abdomen. Hunt is to be praised for his conservative attitude with regard to surgical procedures for duodenal and gastric ulcer as is Bancroft for his very fair presentation of the problem of operation in the three to five day appendices. Bancroft admits that outside of New York City, surgeons are reporting lowered mortalities by delaying operative interference, while in England 54 physicians were in favor of immediate operation, 49 favored delay. Allen in his discussion of massive gastro-intestinal bleeding fails to mention the remarkably low mortality of Meulengracht's cases who were placed immediately on frequent small liquid feedings. Dr. C. D. Hoy of Columbus contributes an extensive review of Ileus which unfortunately contains no bibliography.—R. C. Kirk, M.D.

Tumors of the Nervous System. An Investigation of the Most Recent Advances. Proceedings of the Association for Research in Nervous and Mental Diseases, at New York, December, 1935; $7.50. Williams and Wilkins Company, Baltimore, 1937; pp. 493.

These proceedings present 16 excellent essays bearing directly upon the subject under consideration. The book will be found on the shelves of every one interested in tumors of the nervous system as well as on shelves of every medical library.

Macleod's Physiology in Modern Medicine. Edited by Philip Bard, professor of physiology in Johns Hopkins University School of Medicine. Eighth edition, $8.50. The C. V. Mosby Company, St. Louis, 1938; pp. 1051.

Each major subdivision is the work of a writer who is actively engaged in the study of some phases of the subject he treats. This is a book which each of us should read most carefully as fundamental to all of our efforts to keep up with the march of modern medicine.

Not So Long Ago. A Chronicle of Medicine and Doctors in Colonial Philadelphia. By Cecil K. Drinker, M.D., dean of the School of Public Health, Harvard University. $3.50. Oxford University Press, 1937; pp. 183.

The author's great great grandmother was one of the Society of Friends who lived in Philadelphia and kept a diary of unusual completeness from 1758 to 1807. The family illness brings glimpses of many famous physicians—Benjamin Rush, William Shippen, John Bard and Philip Physick. The book is recommended to all who are interested in Colonial medical practice and for an insight in the Revolution of the Colonies.

Personality and Other Things (A Semi-Autobiography). By Harold Hays, M.D., F.A.C.S. $2.00. American Physicians, Inc., 1937; pp. 163.

The miscellaneous writings of the author with personal references to many of our medical leaders with whom he has become acquainted. Many useful hints in the development of a successful career with a little too much sweetening with the approval of Dale Carnegie and his like.

The Physician's Vitamin Reference Book. E. R. Squibb and Sons, 1938.

This convenient book covers the clinical deficiencies of Vitamins A, B_1, G. Complex, B_2, C, D, and E, as well as multiple deficiencies, and a list of vitamin-like factors. The book is a useful compend for concise information about the subject. The manufacturer does not state under what terms the book is available, so it must be inferred that any physician who is interested need only write to the firm to obtain a copy. The opportunity to secure so much useful informaton, so handily compiled, is relatively infrequent.

IN MEMORIAM

Charles Oscar Allen, M.D., Logan; Medical College of Ohio, Cincinnati, 1882; aged 81; died February 3. Dr. Allen retired two years ago, after having been in active practice for 54 years, of which 15 years were spent in Haydenville and the balance in Logan. He was a member of the Methodist Church, Masonic Order, Odd Fellows, and the Rotary Club. His widow and a daughter survive.

Rufus Raymond Allwood, M.D., Montpelier; Western Reserve University School of Medicine, 1882; aged 83; former member of the Ohio State Medical Association and the American Medical Association; died February 8. Dr. Allwood had practiced in Angola for two years and in Montpelier for 56 years. Surviving are his widow and two sons.

Henry E. Beebe, M.D., Sidney; Cleveland University of Medicine and Surgery, Homeopathic, 1873; aged 89; Fellow of the American College of Surgeons; died February 11. Dr. Beebe retired several years ago after having practiced in Sidney for 55 years. A life-long member of various homeopathic societies, Dr. Beebe was president of the Ohio State Homeopathic Society in 1886 and of the American Institute of Homeopathy in 1904. He served on the first State Medical Board, holding several offices on the Board during his 13 years of membership. Dr. Beebe was a member of the Masonic Order. Surviving are a daughter and two sons, one of whom is Dr. Hugh Beebe, Ann Arbor, Michigan.

Halbert Joel Burdick, M.D., Cleveland; New York University Medical College, 1888; aged 74; former member of the Ohio State Medical Association and the American Medical Association; died January 15. Dr. Burdick retired two years ago, after having practiced in Cleveland for 48 years. He was one of the few surviving charter members of the Cleveland Medical Library Association.

Charles Ross Campbell, M.D., Chester, W. Va.; Starling Medical College, Columbus, 1903; aged 61; former member of the Ohio State Medical Association and the American Medical Association; died January 11. Dr. Campbell practiced in Chester for 35 years. From 1921 to 1931 he maintained membership in the Columbiana County Medical Society. He was a member of the Presbyterian Church. Surviving are his widow, two sons, two brothers and one sister.

Robert Woods Colville, M.D., Mt. Vernon; University of Michigan Medical School, Ann Arbor, Mich., 1882; aged 87; former member of the Ohio State Medical Association and the American Medical Association; died February 5. Dr. Colville practiced for a few years in Omaha, Nebraska, locating in Mt. Vernon in 1885, where he maintained an office for more than 40 years, retiring several years ago because of ill health. He was a former president of the Knox County Medical Society, a former member of the local board of education and a life-long member of the Presbyterian Church. Surviving are two daughters, a brother, and two sisters.

Andrew J. Crawford, M.D., Glouster, College of Physicians and Surgeons of Baltimore, Md., 1887; aged 76; member of the Ohio State Medical Association and the American Medical Association; died January 11. Dr. Crawford practiced in Glouster and Athens County for 51 years. Active in Republican politics, he had represented the county in the Ohio General Assembly for several terms. He was a charter member of the Glouster Lodge of the Masonic Order, and was also a member of the Elks, Knights of Pythias and the Modern Woodmen. A daughter survives.

Frank Bradley Cross, M.D., Cincinnati; Miami Medical College, Cincinnati, 1895; aged 67; member of the Ohio State Medical Association, Fellow of the American Medical Association and the American College of Surgeons; died February 7. Dr. Cross was secretary of the faculty and assistant professor of ophthalmology of the University of Cincinnati College of Medicine and medical director for the Columbia Life Insurance Company. During the World War, he was an examiner for the First Draft Board. His widow and a son survive.

William Allen Evans, M.D., Lakewood; Jefferson Medical College of Philadelphia, 1906; aged 64; died September 16. Dr. Evans had practiced in Pennsylvania for 25 years before locating in Lakewood. He was a member of Epsilon chapter of Alpha Kappa Kappa. A son survives.

Warren Rice Flanagan, M.D., Continental; Ohio State University College of Medicine, 1935; aged 35; member of the Ohio State Medical Association and the American Medical Association; died February 12, in a automobile collision. Following internship, Dr. Flanagan was on duty at a CCC camp in Defiance, and only recently established an office in Continental. Surviving are his widow, his mother, a sister and a brother.

Thomas Arthur Graven, M.D., Wooster; Jefferson Medical College of Philadelphia, 1900; aged 67; member of the Ohio State Medical Association and the American Medical Association; died January 24. Dr. Graven had practiced in

Wooster since 1904. Prior to that time he was located in Mohicanville, Ashland County. Dr. Graven was an officer in the Medical Corps of the U. S. Army during the World War. His hobby was genealogy. He was a member of the Masonic Order, I.O.O.F., Eagles, Knights of Phythias, Modern Woodmen and Moose lodges, and the Presbyterian Church. Surviving are his widow, one son and a brother.

Sherman McKenney, M.D., Fremont; Wayne University College of Medicine, Detroit, Mich., 1892; aged 71; former member of the Ohio State Medical Association and the American Medical Association; died January 16, aboard ship on his homeward cruise from a vacation to Australia. Dr. McKenney practiced in Bellevue for eight years and in Fremont for 35 years. He was a former coroner and health commissioner of Sandusky County. During the World War, Dr. McKenney served in the Medical Corps of the U. S. Army. He was a member of the American Legion. His widow, a daughter and a brother survive.

Naaman Cyrus Miller, M.D., Fostoria; Western Reserve University School of Medicine, 1882; aged 80; former member of the Ohio State Medical Association and the American Medical Association; died January 28. Dr. Miller practiced in Fostoria and Seneca County for 53 years. He retired because of ill health three years ago. Dr. Miller was a member of the Presbyterian Church. His widow and a daughter survive.

Frank W. Milward, M.D., Lakewood; Tufts College Medical School, Boston, Mass., 1919; aged 46; member of the Ohio State Medical Association, Fellow of the American Medical Association and Fellow of the American College of Surgeons; died December 25. Dr. Milward practiced in Cleveland for 15 years. He was a former president of the Cleveland Association of Life Insurance Examiners. His widow, a daughter and a son survive.

William H. Monahan, M.D., Jackson; Medical College of Ohio, Cincinnati, 1874; aged 88; died January 19. One of the oldest practicing physicians in the state, Dr. Monahan had practiced in Jackson for 63 years. His father and five uncles were physicians. He had served five terms as coroner of Jackson County. His widow, two sons, a daughter and a sister survive.

Chesley R. Peck, M.D., Doylestown; Louisville Medical College, 1893; aged 75; died February 3. Dr. Peck retired in 1930 after having practiced in Bridgeport and Clarksburg, W. Va. for 37 years. From 1931 to 1933 he was an associate member of the Summit County Medical Society. His widow, a daughter and a sister survive.

Albert J. Pounds, M.D., Delaware; Columbus Medical College, 1881; aged 80; former member of the Ohio State Medical Association and the American Medical Association died January 12. Dr. Pounds practiced in Watkins for 11 years, in Ostrander for 30 years and the remainder of his life in Delaware. He had served as city health commissioner of Delaware, member of the county board of health, president of the board of education and county coroner. Dr. Pounds was a member of the Methodist Church, the Eagles Lodge and the Knights of Pythias. A daughter and two brothers survive.

Alvah G. Ray, M.D., Jackson; Kentucky School of Medicine, Louisville, Ky., 1894; aged 71; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 19. Dr. Ray was instantly killed in an automobile collision while making a professional call. He had practiced in Jackson County for 43 years. Active in medical organization, he had held various offices in the Jackson County Medical Society, of which he had been a member for over 40 years. He was a charter member of the Rotary Club; member of the Masonic Order and the Loyal Order of Moose; president of the city board of education; and a member of the Church of Christ. Dr. Ray was the last survivor of four brothers who were physicians. His widow and two sons survive.

Henry Lindsay Sanford, M.D., Cleveland; Harvard University Medical School, Boston, Mass., 1900; aged 65; member of the Ohio State Medical Association, Fellow of the American Medical Association; Fellow of the American College of Surgeons; member of the American Association of Genito-Urinary Surgeons; member and past-president of the American Urological Association; died February 5. Dr. Sanford, a former president of the Cleveland Academy of Medicine and the Cleveland Medical Library Association, had practiced in Cleveland for over 30 years. He was chief of staff last year at St. Alexis Hospital, and was assistant clinical professor of genito-urinary surgery at Western Reserve University School of Medicine.

Jessie Penrose Smith, M.D., Pennsville; Ohio Medical University, Columbus, 1896; aged 72; died January 27. Dr. Smith retired several years ago after having practiced in Pennsville for many years.

Z. R. Taylor, M.D., West Jefferson; Starling Medical College, Columbus, 1873; aged 88; died January 17. Dr. Taylor operated a drug store in West Jefferson for many years. He was a member of the Masonic Order and the Methodist Church. A daughter and a son survive.

Carl August Vogel, M.D., Cincinnati; University of Cincinanti College of Medicine, 1932; aged 31; died January 28. Dr. Vogel practiced in Cin-

cinnati for five years. Surviving are his mother, a sister and a brother.

Lewis F. Voke, M.D., Clermont, Florida; Starling Medical College, Columbus, 1896; aged 71; died January 9. Dr. Voke retired several years ago, after having practiced in Columbus for many years. Surviving are his widow, a son—Dr. Edward L. Voke, Akron, a daughter, a brother and two sisters.

George Murray Waters, M.D., Columbus; Bellevue Hospital Medical College, New York, 1881; aged 79; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 22. Dr. Waters was professor of general pathology and nervous diseases in the old Columbus Medical College. Later he became associated with Ohio Medical University, serving as Dean from 1896 to 1906. Later he served as professor and Dean of Starling Ohio Medical College. Dr. Waters was a pioneer in the use of X-ray in diagnosis. His widow and a son survive.

William Willis Wray, M.D., Louisa, Ky.; Baltimore, Medical College, 1897; aged 68; died January 13; Dr. Wray practiced in Portsmouth for a short time before locating in Louisa, Ky.

Frank Howard Yarnell, M.D., West Lafayette; Columbus Medical College, 1879; aged 84; died January 25. Dr. Yarnell retired in 1919 after having practiced in West Lafayette for 40 years. Surviving are his widow and a daughter.

COMING MEETINGS

Ohio State Medical Association, Columbus, May 11-12.

American Medical Association, San Francisco, June 13-17.

American College of Physicians, New York, April 4-8.

American College of Surgeons, New York, Oct. 17-21.

American Public Health Association, Kansas City, Oct. 25-28.

Association of Military Surgeons of the United States, Rochester, Minn., Oct. 13-15.

Tri-State Medical Association, Findlay, April 12.

Statistics compiled by the Metropolitan Life Insurance Company for the year 1936, reveal that Ohio ranked 23rd among the states in the death rate from diphtheria. Cases reported totaled 1,358, with 117 deaths, and a death rate per 100,000 population of 1.7. Figures for the entire country were: 29,885 cases, 3,096 deaths, and a death rate of 2.4.

Great Lakes Section, College of Surgeons, to Meet March 22-24

The Great Lakes Sectional Meeting of the American College of Surgeons, including Ontario, Quebec, New York, Ohio, Michigan and Pennsylvania, will be held at Toronto, March 22, 23 and 24. Headquarters will be at the Royal York Hotel. An exceptionally interesting program of clinics, scientific sessions, hospital conferences, medical motion pictures and other features has been arranged.

Tuesday morning, March 22, will be devoted to registration and operative and non-operative clinics at local hospitals, followed by a hospital conference, which will be continued in the afternoon. Motion pictures will be shown on general surgery and eye, ear, nose and throat surgery. Annual meeting of Fellows of the College will be held at 4:30 P.M. In the evening motion pictures will be shown and there will be a scientific meeting on general surgery.

A similar program of clinics, hospital conferences, motion pictures and scientific meetings is arranged for Wednesday, March 23. A fracture clinic is scheduled for Thursday morning, March 24, also operative clinics in eye, ear, nose and throat surgery. A cancer clinic and scientific meeting (panel round-table conferences), on eye surgery and ear, nose and throat surgery will be held in the afternoon. Motion pictures and a community health meeting will conclude the meeting Friday evening.

Officials of the American College of Surgeons have announced that the meeting will be of interest not only to Fellows of the College but to all members of the medical profession, as well as to hospital trustees, superintendents, nurses and hospital personnel. Members of the Ohio State Medical Association are cordially invited to attend. There will be no registration fees.

Dr. Elmer R. Arn, Dayton, is chairman of the Ohio State Executive Committee of the American College of Surgeons.

Dr. C. L. Cummer Honored

At its organization meeting in Detroit, Michigan, January 14-15, 1938, the new National Academy of Dermatology and Syphilology selected the following officers: Dr. Howard Fox, New York City, president; Dr. Paul O'Leary, Rochester, Minn., vice-president; Dr. Earle D. Osborne, Buffalo, N. Y., secretary; and Dr. Clyde L. Cummer, Cleveland, treasurer.

Dr. Russell L. Cecil will give a lecture on March 2, at the New York Polyclinic Medical School and Hospital on "Bacterial Endocarditis" —1. Classification of Bacterial Endocarditis according to etiology. 2. Description of the various types; 3. Relation to focal infection. 4. Clinical course. 5. Prognosis and treatment.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: PARKE G. SMITH, M.D., CINCINNATI)

ADAMS

Officers of the Adams County Medical Society for 1938 are: Dr. A. R. Carrigan, Manchester, president; Dr. F. C. Leeds, Winchester, vice-president; Dr. O. T. Sproull, West Union, secretary-treasurer; Dr. R. C. Wenrick, Winchester, delegate; Dr. Hazel L. Sproull, West Union, alternate; Dr. S. J. Ellison, West Union, legislative committeeman; and Dr. R. B. Ellison, Peebles, Dr. J. G. Inman, Manchester, and Dr. R. L. Lawwill, Seaman, members of the board of censors. —O. T. Sproull, M.D., secretary.

BROWN

The following officers of the Brown County Medical Society have been re-elected for 1938: Dr. R. B. Hannah, Georgetown, president; Dr. Geo. P. Tyler, Jr., Ripley, secretary; Dr. Robert T. Prine, Ripley, legislative committeeman; Dr. Tyler, delegate, and Dr. Hannah, alternate.—Geo. P. Tyler, Jr., M.D., secretary.

CLINTON

Martha Koehne, nutritionist in the Bureau of Child Hygiene, State Department of Health, gave an interesting talk on "The Relation of Diet to Oral Health" at a joint meeting of the Clinton County Medical and Dental Societies, Tuesday, February 1, at the General Denver Hotel, Wilmington.—Elizabeth Shrieves, M.D., corresponding secretary.

FAYETTE

Fayette County Medical Society has elected the following Washington C. H. physicians, officers for 1938: Dr. E. H. McDonald, president; Dr. L. L. Brock, vice-president; Dr. James F. Wilson, secretary-treasurer; Dr. A. D. Woodmansee, legislative committeeman; Dr. James M. Harsha, public relations committeeman; Dr. J. H. Persinger, medical economics committeeman; Dr. Wilson, delegate, and Dr. M. N. Reiff, alternate. —James F. Wilson, M.D., secretary.

Dr. Arthur W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, spoke on "Problems in Pediatrics", at a meeting of the society, February 3, at Washington C. H.—News clipping.

HAMILTON

The following programs were presented by The Academy of Medicine of Cincinnati during February:

February 1—Joint meeting of the Academy and Cincinnati Dental Society. "Present Day Economic Problems of Medicine and Dentistry", by Dr. J. H. J. Upham, Columbus, President, American Medical Association.

February 8—"Splenectomy: Indications, Contraindications, Results", by Dr. Charles A. Doan, Columbus, professor of medicine, Ohio State University College of Medicine.

February 15—"Edema and Ascites in Hepatic Insufficiency", by Dr. Chester M. Jones, Boston, Mass., assistant professor of medicine, Harvard Medical School.

February 22—"The Relief of Status Asthmaticus by Helium", (A Case Report) by Dr. A. L. Schwartz; "The Serological Response Following Use of Oral Typhoid Vaccines", by Dr. Hugh H. Hengstenberg; "Gonorrhea in the Male", by Dr. Harry O. Lepsky, with discussion by Dr. Arthur W. Wendel.—Bulletin.

HIGHLAND

At a meeting of the Highland County Medical Society, Wednesday afternoon, February 2, at the Hotel Parker, Hillsboro, Dr. Arthur W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, spoke on "Problems in Pediatrics".—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CLARK

Dr. C. W. Hullinger spoke on "Occupational Diseases" at a meeting of the Clark County Medical Society, Thursday noon, February 3, at the Hotel Shawnee, Springfield.—News clipping.

DARKE

The talking motion picture film produced by the American Medical Association on "Diagnosis and Treatment of Syphilis", was presented at a meeting of the Darke County Medical Society, Friday, January 21, at the Christian Church, Greenville. Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, attended the meeting.—W. D. Bishop, M.D., secretary.

GREENE

Dr. Gordon Savage, county health commissioner, gave a brief summary of the annual report of the County Board of Health, at a meeting of the Greene County Medical Society, February 3, at Xenia. Dr. S. C. Ellis reported a case of "Bronchiogenic Carcinoma". Dr. David Taylor reported a case of "Melanosarcoma of the Meninges". Dr. Ernest W. Ekermeyer gave a brief review of recent developments in the treat-

ment of pediatrics. A motion picture film, "Traumatic Surgery" was presented by Dr. R. R. McClellan.

On March 3, Dr. Warren C. Breidenbach, Dayton, will discuss "Undulant Fever". The meeting on April 6 will be a refresher course in pediatrics to be given by Dr. A. Graeme Mitchell, Cincinnati, and associates, at the O. S. & S. O. Home.—Donald F. Kyle, M.D., secretary.

MIAMI

Dr. W. W. Weis, Piqua, spoke on "Cancer of the Breast" at a meeting of the Miami County Medical Society, Friday, February 4, at Stouder Hospital, Troy. Dr. K. F. Lowry, Troy, opened the discussion. Through the courtesy of Davis and Geck Company, two short motion pictures on surgical pathology, "Disease of the Breast", and "Uterine Fibroids", were shown.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

The program for a meeting of the Montgomery County Medical Society, Friday evening, February 4, in the Auditorium of the Fidelity Medical Building, Dayton, was devoted to "Advances in Medicine During the Year 1937". The speakers were: Dr. H. E. King, "General Medicine", Dr. M. R. Haley, discussant; Dr. S. J. Winter, "Pediatrics", Dr. T. F. Humphrey, discussant; Dr. E. C. Fischbein, "Neurology", Dr. E. L. Hooper, discussant.

At a recent meeting of the society, a fund of $145 was raised by voluntary donations for the use of members who might be in extreme need.

Dr. Emmerich von Haam, professor of pathology, Ohio State University College of Medicine, lectured on "Diagnosis of Venereal Lesions" at a meeting of the society, Friday evening, February 18, at Miami Valley Hospital.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

ALLEN

Dr. B. H. Nichols, Cleveland, gave an address on "Roentgenological Problems of Chest Diseases", at a meeting of the Lima and Allen County Academy of Medicine, Tuesday evening, January 18, at Lima Memorial Hospital.—News clipping.

AUGLAIZE

Dr. T. P. Sharkey, assistant director of the Diagnostic Laboratories, Miami Valley Hospital, Dayton, was the speaker at the regular meeting of the Auglaize County Medical Society, at Wapakoneta, Thursday evening, February 10. The subject of his very instructive address was "General Management of Diabetes", in which he considered the arrangement of diet, and gave special attention to protamine zinc therapy.

After 50 years of practice, Dr. John H. Bayliff, Uniopolis and Dr. C. L. Dine, Minster, have retired from active professional life and from the Auglaize County Medical Society.—Chas. C. Berlin, M.D., secretary.

LOGAN

At a meeting of the Logan County Medical Society, Friday evening, January 21, at the Logan Hotel, Bellefontaine, Dr. C. K. Startzman spoke on "The Heart". Three reels of motion pictures were shown.—News clipping.

MARION

The Marion Academy of Medicine held its regular meeting, Tuesday, February 1, at Marion City Hospital. Dr. R. W. Kissane, Columbus, gave a very interesting talk on "Trauma in Organic Heart Disease".—R. G. McMurray, M.D., secretary.

SENECA

"The Diagnosis and Treatment of the More Common Ano-Rectal Diseases", was the subject of an address made by Dr. W. W. Green, Toledo, at a meeting of the Seneca County Medical Society, Thursday evening, February 17, at the Shawhan Hotel, Tiffin. A three-reel motion picture film on "The Two Stage Resection of Rectum" was shown.—Edmund F. Ley, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

LUCAS

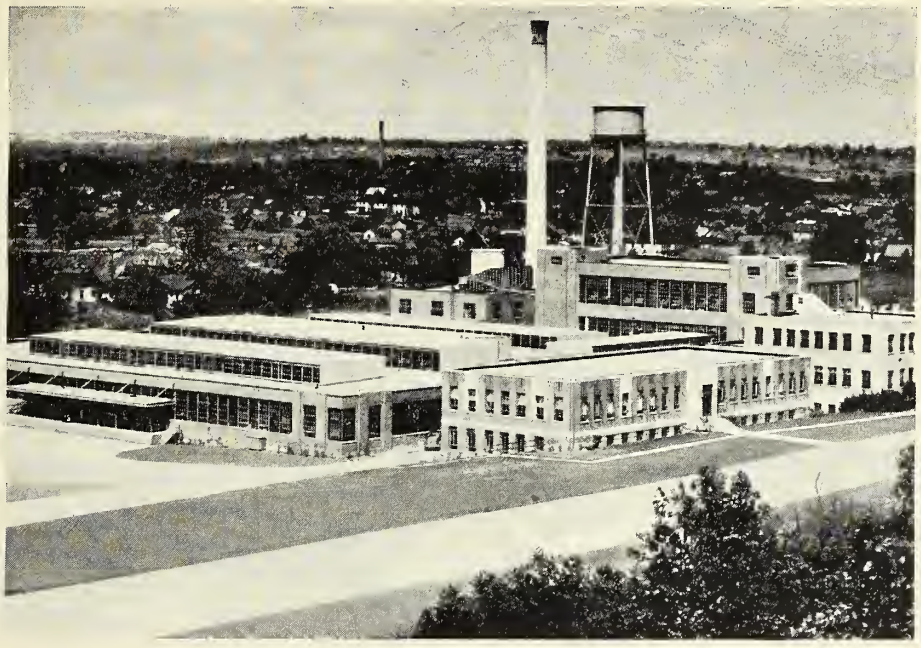
The following programs were presented by the Toledo Academy of Medicine during February:

February 4—Symposium by members of the Medical Division of the State Industrial Commission. "Encephalography as an Aid to Diagnosis in Obscure Head Injuries", paper prepared by Dr. Roy J. Secrest, assistant medical supervisor, and in his absence due to illness, presented by Dr. Sidney McCurdy, medical supervisor; "Evaluation of Disability", by Dr. M. B. Rusoff; "Chronic Osteoarthritis", by Dr. H. P. Worstell; "The Expert Medical Witness", by J. A. Davis, attorney in the Legal Department; "The Relationship of Workmen's Compensation to State Medicine", by Dr. McCurdy.—Bulletin.

February 11—Section of Pathology, Experimental Medicine and Bacteriology. "Nephrosis—Report of a Case", by Dr. Foster Myers and Dr. R. F. Slotterbeck; "Renal Infarction—Report of a Case", by Dr. A. D. Vogelsang.

February 18—Motion picture film "Treatment of Syphilis", produced by the American Medical Association and the United States Public Health Service.

February 25—Surgical Section. "Surgery of the Kidney", by Dr. Herman L. Kretchmer, clini-



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CINCINNATI, U. S. A.

cal professor of surgery, Rush Medical College, Chicago.—Bulletin.

Officers of the Academy for 1938 are: Dr. Wm. A. Neill, president; Dr. Carll S. Mundy, vice-president; Dr. E. W. Huffer, secretary; Dr. W. W. Alderdyce, treasurer; Dr. C. W. Waggoner, chairman of legislative committee; Dr. S. R. Salzman, chairman of medical economics committee; Dr. A. A. Brindley, Dr. E. B. Gillette, Dr. J. F. Wright, delegates, and Dr. R. C. Young, Dr. A. P. Hancuff and Dr. E. G. Galbraith, alternates.—H. C. Gerber, Jr., executive secretary.

PAULDING

At a meeting of the Paulding County Medical Society at Paulding, January 21, a fee schedule was agreed upon for all county indigent medical care, including aid to dependent children, relief administered by county commissioners and township trustees, soldier's relief, etc.—F. A. McCammon, M.D., secretary.

SANDUSKY

Dr. Edward J. McCormick, Toledo, Councilor of the Fourth District, Ohio State Medical Association, spoke on "Cancer Control", and Dr. Allen S. Avery, Toledo, discussed "Results in 150 Cases of Genito-Urinary Infection Treated With Sulfanilamide," at a meeting of the Sandusky County Medical Society, Thursday evening, January 27, at the Elks' Lodge, Bellevue.—T. R. Cunningham, M.D., secretary.

WOOD

"Present Day Treatment of Urinary Bladder Neck Obstruction" was the subject presented by Dr. E. O. Ockuly, Toledo, at a dinner meeting of the Wood County Medical Society, February 17, at the Woman's Club, Bowling Green.—R. N. Whitehead, M.D., secretary.

Fifth District

(COUNCILOR: H. V. PARYZEK, M.D., CLEVELAND)

ASHTABULA

Officers of the Ashtabula County Medical Society for 1938 are: Dr. Donald Forward, Ashtabula, president; Dr. P. R. Longaker, Conneaut, vice-president; Dr. A. A. DeCato, Ashtabula, secretary-treasurer; Dr. O. A. Dickson, Jefferson, Dr. R. B. Wynkoop, Ashtabula, and Dr. N. C. Kiefer, Geneva, members of board of censors.—A. A. DeCato, M.D., secretary.

On January 11, the society was addressed by Dr. Chester D. Christie, Cleveland, on "The Pneumonia Problem".—Donald Forward, M.D., president.

CUYAHOGA

During February, The Academy of Medicine of Cleveland presented the following programs:

February 4—Clinical and Pathological Section. "Conservative Method of Treating Large Cysts of Jaws", by P. J. Aufderheide, D.D.S.; "Complete Heart Block with Recovery", by Dr. J. P. Anderson; "Can Intensive X-ray Treatment Be Justified"? by Dr. Clifford Jones; "Resection of Presacral Nerve for Hypertonicity of Vesical Sphincter", by Dr. J. G. Brady; "Repair of Vesicovaginal Fistula", by Dr. H. B. Wright; "Coarctation of the Aorta", by Dr. E. W. Parsons.

February 11—Joint Meeting of the Experimental Medicine Section and Cleveland Section of the Society for Experimental Niology and Medicine. "The Influence of External Temperature Upon the Course of Certain Virus Infections in the Rabbit", by R. L. Thompson, Sc.D.; "The Prevention of Nutritional Panmyelophthisis in Rats", by Dr. Paul Gyorgy; "The Actions of Trimethyl Bismuth", by Dr. T. Sollmann and Dr. J. Seifter; "The Influence of Various Barbiturate Derivatives Upon the Oxygen Uptake of Rat Liver Slices", by Carla Zorn, M.S., E. Muntwyler, Ph.D., and O. W. Barlow, Ph.D.; "Growth Curves of Well Children", by Dr. T. Wingate Todd and Katherine Simmons, M.A.

February 16—Obstetrical and Gynecological Section. "The Sterility-Contraception Study of the Foundation Program", by Dr. T. Wingate Todd; "The Relation of Body Temperature to the Time of Ovulation as Demonstrated by the Single Exposure Pregnancy", by Dr. Theodore T. Zuck; "The Use of the Vaginal Smear as a Diagnostic Aid in Determination of the Time of Ovulation", by Dr. Boris B. Rubenstein; "Monstrosities", with a demonstration of a specimen of dicephalus tribrachius, by Dr. J. J. Thomas.

February 18—Regular Academy Meeting. "Diseases of the Breast", by Dr. Chas. F. Geschickter, instructor in surgery, Johns Hopkins University School of Medicine.

February 23—Industrial Medicine and Orthopedic Section. "Injuries of the Upper Portion of the Humerus", by Dr. J. M. Hamilton; "Relation of Peripheral Vascular Disease to Industrial Accidents", by Dr. R. I. Peck; "Abdominal and Pelvic Trauma", by Dr. H. B. Wright; "Eye Injuries", by Dr. H. H. Shiras.—Bulletin.

ERIE

Dr. Judson D. Wilson, Columbus, spoke on "The Most Interesting and Most Frequent Types of Fractures", at a meeting of the Erie County Medical Society, Thursday evening, January 27, at the Hotel Rieger, Sandusky.—News clipping.

HURON

Officers of the Huron County Medical Society for 1938 are: Dr. G. F. Linn, Norwalk, president; Dr. C. B. Thomas, Norwalk, vice-president; Dr. O. J. Nicholson, Norwalk, secretary-treasurer and Dr. J. C. Steiner, Willard, legislative committeeman.—O. J. Nicholson, M.D., secretary.

Principal speakers at the annual meeting of the society, Thursday evening, January 27, at

BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

I. CLEANSING OPERATIONS

As reference to a recent text on canning will disclose (1) the details of commercial canning procedures will vary from product to product. There are, however, certain basic operations which are included in practically all canning procedures. In the belief that they may prove of interest, it is our intention to describe in broad detail the nature and purposes of these essential operations.

One of the first and most important steps in commercial canning is the thorough cleansing of the raw food material received at the cannery. The purpose of such an operation is, of course, immediately evident, namely, to remove soil, dirt or other inedible substances which may be present. However, cleaning also serves to reduce substantially the load of spoilage bacteria with which Nature usually endows raw foods.

Commercially, cleansing is effected in a variety of ways. In general, however, water washers specifically designed for the various types of products are used. In these machines, the raw food material is subjected to high-pressure sprays or strong flowing streams of potable water while passing along a moving belt or while being tumbled by agitating or revolving screens. Sometimes a "flotation" type of washer is also used to remove chaff or similar material. With certain products, water washing is preceded by a "dry" cleaning treatment in which adhering soil and dirt is mechanically removed from the food by revolving or agitating screens, or by strong air-blasts.

Also, in certain canning procedures, operations whose basic functions are not primarily to clean the raw material may also exert a cleansing effect. Thus, the "blanch" or scalding treatment accorded many products serves to clean the food, as does the water spray sometimes applied to foods after the blanch.

Modern canners know the necessity of thorough cleansing of the raw materials they use. They appreciate that thorough cleaning and removal of extraneous material decreases the load of spoilage organisms which must be destroyed by the heat processes to which all canned foods are subjected. They also appreciate the necessity of maintaining strict plant and equipment sanitation to destroy spoilage bacteria which may be carried in by raw foods.

Because of the efficient cleansing of raw materials and close attention to the other important operations in the commercial canning procedures, modern canned foods must be ranked among the most wholesome foods coming to the American table. (2)

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230 Park Avenue, New York, N. Y.

(1) 1937 Appertizing or The Art of Canning, A. W. Bitting, The Trade Pressroom, San Francisco.

(2) Preventive Medicine and Hygiene, M. J. Rosenau, Appleton-Century Co., New York.

This is the thirty-third in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

the Memorial Hospital, Norwalk, were Dr. J. E. Rauschkolb, Cleveland, and Dr. Harry V. Paryzek, Cleveland, Councilor of the Fifth District of the Ohio State Medical Association.—News clipping.

LORAIN

Dr. Harry V. Paryzek, Cleveland, Councilor for the Fifth District of the Ohio State Medical Association, gave an address on "The Dangers of Socialized Medicine", at a meeting of the Lorain County Medical Society, Tuesday evening, February 8, at the Hotel Greystone, Elyria.—L. H. Trufant, M.D., secretary.

MEDINA

Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, presented a motion picture on "Syphilis", at a meeting of the Medina County Medical Society, Thursday afternoon, January 20, at the Evanon, Medina.—News clipping.

Sixth District

(COUNCILIOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

ASHLAND

Dr. R. S. Friedley, Akron, gave a very interesting and instructive talk on "Infant Feeding", at a meeting of the Ashland County Medical Society, Friday, January 14, at Ashland.

"Medical Follies of 1938", was the subject of an address made by Dr. Walter G. Stern, Cleveland, at the annual Ladies' Night Banquet, Friday evening, February 25.

Officers of the society for 1938 are: Dr. Elmer Jackson, Perrysville, president; Dr. E. L. Clem, Ashland, president-elect; Dr. M. D. Shilling, secretary-treasurer, and Dr. H. M. Gunn, Ashland, legislative committeeman.—M. D. Shilling, M.D., secretary.

PORTAGE

At a meeting of the Portage County Medical Society, Thursday evening, February 3, at the office of Dr. J. H. Krape, Kent, a talk on "Pediatric Problems" was made by Dr. J. G. Kramer, chief of the medical staff of Children's Hospital, Akron.—E. J. Widdecombe, M.D., secretary.

STARK

Dr. Joseph H. Barach, Pittsburgh, gave an illustrated lecture, entitled "Medicine in South America", and Dr. T. E. Newell, Dayton, showed colored motion pictures and spoke on "A Doctor's Vacation in South America", at a meeting of the Stark County Medical Society, Wednesday evening, February 9, at St. Paul's Episcopal Church, Canton.

Officers of the society for 1938 are: Dr. George N. Wenger, Massillon, president; Dr. C. N. Clark, Canton, president-elect; Dr. Clair B. King, Canton, secretary-treasurer; Dr. L. E. Anderson, Greentown, chairman, legislative committee; Dr.



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*BECK, page 98, "Obstetrical Practice," published by the Williams and Wilkins Co., 1935.

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R. K. Ramsayer, Canton, chairman, public relations committee; Dr. Emerson Gillespie, Canton, chairman, medical economics committee; Dr. J. P. DeWitt, Canton; Dr. A. R. Basinger, North Canton, and Dr. George F. Zinninger, Canton, delegates; Dr. V. Z. Garster, Waynesburg, Dr. W. C. Manchester and Dr. Albert Wild, Alliance, alternates.—Clair B. King, M.D., secretary.

SUMMIT

Dr. E. H. Rynearson, Rochester, Minn., assistant professor of medicine, Graduate School of the University of Minnesota, spoke on "The Syndromes Resulting from Disturbances of the Endocrine Glands", at a meeting of the Summit County Medical Society, Tuesday evening, February 1, at the Mayflower Hotel, Akron.—Bulletin.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

CARROLL

"Treatment of Syphilis" was the subject discussed by Dr. Glenn C. Dowell, at a meeting of the Carroll County Medical Society, Thursday, January 13, at Carrollton.—News clipping.

COLUMBIANA

Dr. J. M. King, Pittsburgh, spoke on "Arthritis, with Special Attention to Orthopedic Treatment" at a meeting of the Columbiana County Medical Society, Tuesday evening, February 8, at the American Legion Home, Lisbon.—News clipping.

COSHOCTON

Officers of the Coshocton County Medical Society for 1938 are: Dr. W. F. Lyons, Coshocton, president; Dr. H. W. Lear, Coshocton, vice-president; Dr. J. D. Lower, Coshocton, secretary-treasurer; Dr. E. M. Wright, Coshocton, legislative committeeman; Dr. J. C. Briner, West Lafayette, correspondent for *The Journal;* Dr. Wright, medical economics committeeman; Dr. A. P. Magness, Coshocton, delegate, and J. G. Smailes, Coshocton, alternate.

TUSCARAWAS

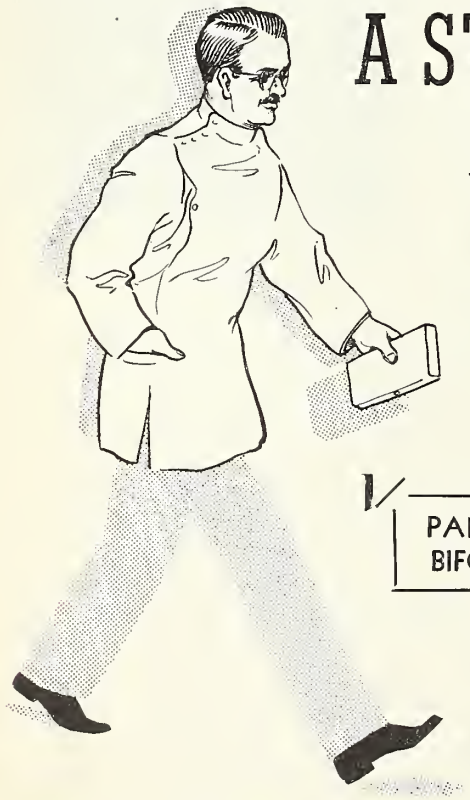
On February 10, at Union Hospital, Dover, Dr. Sam Gerber, coroner of Cuyahoga County, addressed a meeting of the Tuscarawas County Medical Society on "The Influence of Alcohol Upon Traffic Accidents". Dr. Gerber called particular attention to the determination as to when a person is under the influence of alcohol, by alcohol concentration in the blood.—C. J. Miller, M. D., chairman of policy and publicity committee.

Eighth District

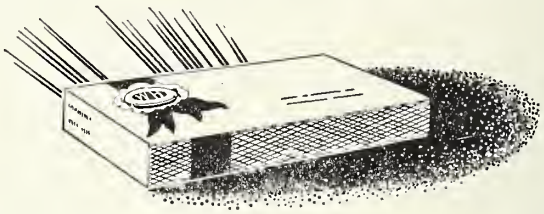
(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

ATHENS

Athens County Medical Society has elected the following officers for 1938: Dr. Blaine R. Golds-



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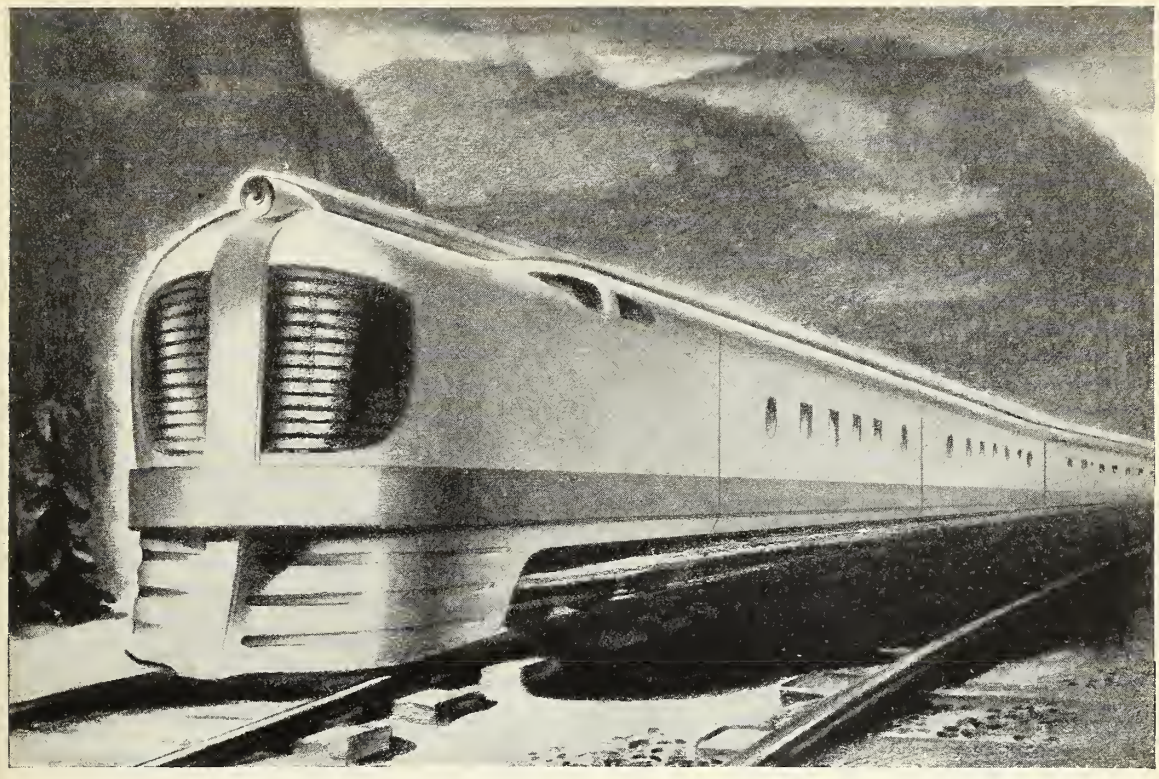
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berry, Athens, president; Dr. J. L. Webb, Nelsonville, vice-president; Dr. C. R. Hoskins, Athens, secretary-treasurer; Dr. H. T. Phillips, Athens, Dr. E. LeFever, Glouster, and Dr. W. E. Howe, Nelsonville, legislative committee; Dr. Wm. Hubert Hyde, Nelsonville, Dr. M. H. Mitchell, Albany, and Dr. J. R. Sprague, Athens, public relations committee; Dr. N. Hill, Nelsonville, Dr. L. D. Robinson, Guysville, and Dr. T. H. Morgan, Athens, medical economics committee; Dr. Hyde, delegate, and Dr. E. I. Stanley, Albany, alternate. —C. R. Hoskins, M.D., secretary.

FAIRFIELD

Officers of the Fairfield County Medical Society for 1938 are: Dr. C. P. Swett, Sugar Grove, president; Dr. H. M. Amstutz, Lancaster, vice-president; Dr. C. W. Brown, Lancaster, secretary-treasurer; Dr. Ralph H. Smith, Lancaster, delegate; Dr. C. H. Hamilton, Lancaster, alternate; Dr. C. G. Axline, Lancaster, legislative committeeman; Dr. J. W. Whittus, Baltimore, Dr. A. V. Lerch, Pleasantville, and Dr. G. O. Beery, Lancaster, Board of Censors.—C. W. Brown, M.D., secretary.

At a luncheon meeting of the society, January 12 at the Georgian, Lancaster, Dr. E. E. Campbell, Columbus, spoke on "Heart Diseases".—News clipping.

GUERNSEY

At a meeting of the Guernsey County Medical Society, January 20, at the Berwick Hotel, fee schedules were arranged with cities and townships in the county for medical care of the indigent.

On February 3, H. C. Cameron, superintendent of the Cambridge Colleries Company, addressed members of the society on the mining of coal, stressing particularly safety measures used in the mines of today.—O. Reed Jones, Correspondent for *The Journal.*

LICKING

Officers of the Licking County Medical Society for 1938 are: Dr. George A. Gressle, Newark, president; Dr. W. L. Evans, Hanover, vice-president; Dr. Donald R. Sperry, Newark, secretary-treasurer; Dr. J. Fleek Miller, Newark, delegate, and Dr. W. E. Shrontz, Newark, alternate.—Donald R. Sperry, M.D., secretary.

Dr. Louis A. Mitchell spoke on "The Diagnosis and Treatment of Pneumonia" at a meeting of the society, Tuesday evening, January 25, at the Warden Hotel, Newark.—News clipping.

MORGAN

Members of the Morgan County Medical Society held a joint session with local dentists Tuesday evening, January 18, at the Kennebec Hotel, McConnelsville. A number of impromptu addresses were given following dinner. Dr. A.

CHAS. F. BOWEN, M.D.

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OBSTETRICS—Two Weeks Intensive Course starting April 11th; Informal Course.

FRACTURES & TRAUMATIC SURGERY—Informal Practical Course; Ten Day Intensive Course starting April 11th.

OTOLARYNGOLOGY—Two Weeks Intensive Course starting April 4th.

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CHICAGO, ILLINOIS

A. Tombaugh, president of the society, was toastmaster.—News clipping.

MUSKINGUM

At a meeting of the Muskingum County Academy of Medicine, Wednesday evening, February 2, at the University Club, Zanesville, Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, presented a nine-reel talkie on "Syphilis".—Beatrice T. Hagen, M.D., secretary.

PERRY

At a meeting of the Perry County Medical Society, Thursday noon, February 17, at the Park Hotel, New Lexington, Dr. George M. Curtis, professor of surgery, Ohio State University College of Medicine, spoke on "The Significance of Iodine in the Management of Thyroid Disease".—F. J. Crosbie, M.D., secretary.

WASHINGTON

Officers of the Washington County Medical Society for 1938 are: Dr. S. E. Edwards, Marietta, president; Dr. C. R. Sloan, Marietta, vice-president; Dr. W. S. Hawn, Marietta, secretary-treasurer; Dr. R. W. Riggs, Marietta, delegate and Dr. C. C. Deamude, Waterford, alternate.—W. S. Hawn, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

HOCKING

Dr. Robert W. Miller, Hemlock, gave a splendid lecture on "Diagnosis and Treatment of Abdominal Diseases", at a luncheon meeting of the Hocking County Medical Society, January 13, at Logan.—M. H. Cherrington, M.D., secretary.

LAWRENCE

At a meeting of the Lawrence County Medical Society at Ironton, January 13, it was voted to hold two regular meetings each month, on the first and third Tuesdays at 8:30 P.M.—Wm. A. French, M.D., secretary.

SCIOTO

Dr. J. I. Hofbauer, Cincinnati, spoke on "Intra-Cervical and Intra-Venous Use of Pituitary Substances in Obstetrics", at a meeting of the Hempstead Academy of Medicine, Monday evening, February 14, at the General Hospital, Portsmouth. Moving pictures of local physicians were shown.

Officers of the Academy for 1938 are: Dr. Wm. E. Scaags, president; Dr. O. D. Tatje, vice-president; Dr. Wm. M. Singleton, secretary-treasurer; Dr. L. Dow Allard, delegate and Dr. J. P. McAfee, alternate, all of Portsmouth.—W. M. Singleton, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

The following programs were presented by the Columbus Academy of Medicine during February:

February 7—"Sudden and Unexpected Deaths from Natural Causes", by Dr. Milton Helpern, assistant medical examiner, New York City, and assistant professor of forensic medicine, New York University College of Medicine.

February 14—Section in General Medicine.—Joint Meeting with Columbus Academy of Pharmacy. "Relation Between the Physician and the Pharmacist", by Charles Mick, president of the Academy of Pharmacy, with discussion by Dr. John Rauschkolb.

February 21—"Gall Bladder Disease", by Dr. Warren H. Cole, Chicago, professor of surgery, University of Illinois College of Medicine.

Dr. B. W. Abramson spoke on "The Importance of Mental Guidance in Childhood" at the meeting of the Section on General Medicine, January 24.

Commitee chairmen of the Academy for 1938 are: Dr. Robin C. Obetz, program; Dr. H. M. Clodfelter, medical progress; Dr. A. A. Hall, public health; Dr. Russel G. Means, legislative; Dr. L. W. Rohr, membership; Dr. Edwin J.

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Stedem, library; Dr. William F. Millhon, civic affairs and medical economics; Dr. Ralph B. Taylor, necrology; Dr. Frank A. Riebel, unauthorized practice, and Dr. Louis N. Jentgen, aid to dependent children.—Bulletin.

KNOX

Dr. Russell L. Haden, Cleveland, gave an excellent and complete presentation on "Chronic Arthritis", at a meeting of the Knox County Medical Society, Thursday afternoon, January 27, at The Alcove, Mt. Vernon. Dr. C. C. Sherbourne, Columbus, Councilor for the Tenth District of the Ohio State Medical Association, discussed certain legislative problems. The meeting was attended by 21 local physicians and Dr. Judson D. Wilson, Columbus.—John C. Drake, M.D., secretary.

PICKAWAY

The following Circleville physicians are officers of the Pickaway County Medical Society for 1938: Dr. Harry D. Jackson, president; Dr. Edwin Shane, vice-president; Dr. V. D. Kerns, secretary-treasurer; Dr. A. D. Blackburn, legislative committeeman; Dr. C. G. Stewart, delegate, and Dr. Shane, alternate.—V. D. Kerns, M.D., secretary.

UNION

Officers of the Union County Medical Society for 1938 are: Dr. Robert H. Martin, Magnetic Springs, president; Dr. Fred C. Callaway, Marysville, secretary-treasurer; Dr. John Dean Boylan, Milford Center, delegate; Dr. Harry G. Southard, Marysville, alternate and legislative committeeman.—Fred C. Calloway, M.D., secretary.

New Neurophysiology Journal

Announcement is made of a new scientific periodical, *The Journal of Neurophysiology.* Its primary aim, according to the editorial board, J. G. Dusser de Barenne, J. F. Fulton and R. W. Gerard, New Haven, Conn., is to provide a channel for prompt publication of original work bearing on the functions of the nervous system, peripheral and central. Manuscripts submitted for publication should be addressed to The Eidtors, *Journal of Neurophysiology,* 333 Cedar Street, New Haven, Conn. The subscription rate for the volume, which will be published six times during 1938, is $6, payable in advance direct to the publisher: Charles C. Thomas, 220 East Monroe St., Springfield, Ill.

Special Award Rules Announced

Rules governing the award of "The Foundation Prize" of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, are as follows:

(1) The award which shall be known as "The Foundation Prize" shall consist of $500.00.

(2) Eligible contestants shall include only (a) interns, residents, or graduate students in Obstetrics, Gynecology or Abdominal Surgery, and (b) physicians (with an M.D. degree) who are actively practicing or teaching Obstetrics, Gynecology or Abdominal surgery.

(3) Manuscripts must be presented under a nom-de-plume, which shall in no way indicate the author's identity, to the Secretary of the Association together with a sealed envelope bearing the nom-de-plume and containing a card showing the name and address of the contestant.

(4) Manuscripts must be limited to 5,000 words, and must be typewritten in double-spacing on one side of the sheet. Ample margins should be provided. Illustrations should be limited to such as are required for a clear exposition of the thesis.

(5) The successful thesis shall become the property of the Association, but this provision shall in no way interfere with publication of the communication in the journal of the author's choice. Unsuccessful contributions will be returned promptly to their authors.

(6) All manuscripts entered in a given year must be in the hands of the secretary before June 1, 1938.

(7) The award will be made at the Annual Meeting of the Association, at which time the successful contestant must appear in person to present his contribution as a part of the regular scientific program, in conformity with the rules of the Association. The successful contestant must meet all expenses incident to this presentation.

(8) The President of the Association shall annually appoint a Committee on Award which, under its own regulations shall determine the successful contestant and shall inform the Secretary of his name and address at least two weeks before the annual meeting."

Additional information can be obtained by writing to Dr. Jas. R. Bloss, secretary, 418 Eleventh Street, Huntington, W. Va.

Mansfield—Officers of the staff of General Hospital for 1938 are: Dr. W. E. Wygant, president; Dr. F. J. Heringhaus, vice-president, and Dr. F. W. Gillig, secretary.

Van Wert—Officers of the County Hospital medical staff for 1938 are: Dr. J. B. Sampsell, president; Dr. R. E. Shell, vice-president, and Dr. H. E. Wilkinson, secretary.

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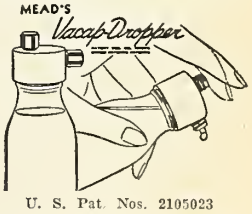
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Regional Allergy Society Organized

Physicians from Indianapolis, Dayton, Springfield, Columbus, Louisville and Cincinnati, specializing in allergy, met at the Netherland Plaza Hotel, Cincinnati, February 6, to organize a regional allergy society. The society was formally established and agreed to meet in Cincinnati at intervals of two months. Those attending the initial meeting were: Dr. L. E. Seyler and Dr. G. C. Grout, Dayton; Dr. A. E. Cohen and Dr. F. A. Simon, Louisville; Dr. Jonathan Forman, Dr. John H. Mitchell and Dr. William F. Mitchell, Columbus; Dr. C. B. Bohner and Dr. B. Kraft, Indianapolis; Dr. C. A. Marsh, Springfield; and Dr. G. E. Rockwell, Dr. R. B. Homan, Dr. C. A. Koch, Dr. A. R. Zoss, Dr. J. Harold King, Dr. C. B. Wiedemer and Dr. S. L. Bauer, Cincinnati. Temporary officers elected were: Dr. Zoss, chairman, and Dr. King, secretary. Other members of the executive committee are: Dr. Bohner, Dr. Simon and Dr. Forman. Dr. Schwartz presented a paper and motion pictures on "The Use of Helium in Respiratory Diseases". The next meeting will be held in Cincinnati, Saturday and Sunday, April 8 and 9.

Philadelphia Postgraduate Institute

The Third Annual Postgraduate Institute, offering an intensive and interesting study of the Diseases of the Digestive Tract, will be conducted by The Philadelphia County Medical Society from March 28 to April 1, inclusive.

The program to be held in the Bellevue-Stratford Hotel, Philadelphia, has been designed to meet the needs of all members of the profession, but particularly those in general practice.

An invitation to attend the 1938 session has been extended to the members of all county societies.

Lecturers, 73 in number, have been selected from among the foremost teachers in Philadelphia.

The only charge is a $5 registration fee to cover the Institute's expenses.

Additional information may be secured from The Philadelphia County Medical Society, 21st and Spruce Streets, Philadelphia, Pa.

Workmen's Compensation Institute

Dr. Sidney McCurdy, medical supervisor, State Industrial Commission; Will T. Blake, member of the Commission, and John J. Steel, member, Cleveland Regional Claims Board, were the principal speakers at a labor institute on workmen's compensation held in Elyria recently. The meeting was open to the general public. A large audience attended to hear how the workmen's compensation law is administered.

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**Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245*
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐ Laryngoscope, 1935, XLV, 149-154 ☐
N. Y. State Jour. Med., 1935, 35, No. 11, 590 ☐ Laryngoscope, 1937, XLVII, 58-60 ☐

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Graduate Course in Venereal Diseases Offered by Western Reserve

A one-week graduate course in the treatment of venereal diseases is being offered at Western Reserve University School of Medicine. One formal lecture on the several venereal diseases will be given during the week. The other phases of the subject such as intravenous and intra-muscular treatments, darkfield examinations, etc., will be demonstrated. The course will be conducted on the seminar plan with free discussion of problems in diagnosis and treatment of every type of syphilis. Part-time students will be accepted for longer periods. Any regularly licensed physician in the state may attend the course, without fees. Further information and a copy of the working schedule can be obtained by writing Dr. George W. Binkley, 2085 Adelbert Road, S. E., Cleveland.

Annual Menninger Clinic Lectures

The medical staff of the Menninger Clinic will conduct its fourth annual postgraduate course on "Neuropsychiatry in General Practice", April 25-30, at the Menninger Clinic, Topeka, Kansas. The course this year will include a brief introduction to the fields of neurology and psychiatry and a specific application of this knowledge to the large group of cases of psychoneuroses, psychoses and psychogenic and neurological disorders which every physician meets in his daily practice. As in previous years, several guest speakers, prominent in the fields of neurology and psychiatry, will appear at the evening sessions of the course.

Changed Locations

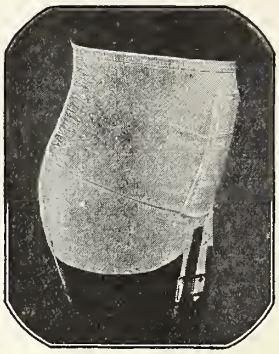
Among physicians who have recently established new locations in Ohio are the following: Dr. W. B. Devine, Jr., Nashport; Dr. Joseph Uttal, Alliance; Dr. A. G. Allen, Miamisburg; Dr. Charles E. Bender, Fostoria; Dr. G. W. Brugler, Cadiz; Dr. L. S. Dillon, Chesapeake; Dr. Edwin B. Banister, Fremont; Dr. James M. Foley, Columbus; Dr. Charles A. Bogue, Warren; Dr. John E. Dougherty, Canton; Dr. Gordon Pumphrey, Mt. Vernon, and Dr. Robert J. Gray, Prospect.

Selman Foundation Lecture

Members of the medical profession are cordially invited to attend the opening lecture of the Julius J. Selman Foundation at Mt. Sinai Hospital, Cleveland, Monday, March 14, at 8:15 P.M. Dr. Albert A. Epstein, clinical professor of medicine, New York University College of Medicine, and attending physician of Beth Israel Hospital and the Hospital of Joint Diseases, New York City, will speak on "Nephrosis". Friends established the foundation in memory of Dr.

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Selman, who died on April 24, 1937. A medical lecture will be given annually under the auspices of the foundation.

Ophthalmology Board Sets Dates For Examinations During 1938

The American Board of Ophthalmology announces that in 1938 it will hold examinations in San Francisco, June 13, during the American Medical Association session; Washington, D. C., Oct. 8, during the American Academy of Ophthalmology and Oto-Laryngology meeting; Oklahoma City, Nov. 14, during the Southern Medical Association meeting.

Up to the end of 1937, the board has held 56 examinations and had certified 1,498 ophthalmologists. The Board on January 1, 1938, issued a new and complete list of physicians certificated to date, arranged geographically. This list was mailed gratis to all certificated persons and to over 250 hospitals and institutions.

The board has established a preparatory group of prospective candidates for its certificate. The purpose of this group is to furnish such information and advice to physicians who are studying or about to study ophthalmology as may render them acceptable for examination and certification after they have fulfilled the necessary requirements. Any graduate or undergraduate of an approved medical school may make application for membership in this group. Upon acceptance of the application, information will be sent concerning the ethical and educational requirements, and advice to members of the group will be available through preceptors who are members or associates of the board. Members of the group will be required to submit annually a summarized record of their activities.

The fee for membership in the preparatory group is $10, but this amount will be deducted from the $50 ultimately required of every candidate for examination and certification.

In future issues of the directory of the American Medical Association certificated ophthalmologists will be so designated in their listing.

Applications for examinations should be made immediately. Required number of case reports must be filed at least 60 days prior to the date of examination. Application blanks can be secured from Dr. John Green, 3720 Washington Boulevard, St. Louis, Mo.

Cincinnati—Raymond A. Swink, executive secretary of the Cincinnati Academy of Medicine spoke on "The Business Side of Medical and Dental Practice" at the recent annual meeting of the Columbus Bureau of Medical Economics.

Lorain—Officers of the St. Joseph's Hospital staff for 1938 are: Dr. Albert J. Kirchner, president; Dr. N. E. Garver, vice-president, and Dr. D. L. Zaworski, secretary-treasurer.

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NEWS NOTES

Akron—Officers of the Children's Hospital Staff for 1938 are: Dr. J. G. Kramer, chief of staff; Dr. R. F. Thaw, chief-elect, and Dr. A. S. McCormick, secretary.

Canton—Dr. William E. Brogden was certified by the American Board of Orthopedic Surgeons at its recent meeting in Los Angeles.

Cardington—"Hazards of 1938" was the subject of an address by Dr. A. W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, at a recent meeting of the local P.T.A.

Columbus—Construction of a four story addition to Children's Hospital, equipped with a pool and other facilities for hydro-therapeutic treatment of infantile paralysis, has been assured by a gift of $150,000 from the Amelia and Julius Marks Charitable Trust.

Cleveland—Dr. T. Wingate Todd, professor of anatomy of Western Reserve University School of Medicine spoke on "Facial Growth as an Objective Record of Child Health" at a meeting of the Eastern Association of the Angle School of Orthodontia, at Boston, January 24-25.

Delphos—Dr. J. B. Egts, who will be 87 years old on April 14, was recently appointed city health commissioner.

Findlay—Dr. J. Hugh Marshall discussed "Socialized Medicine" at a recent meeting of the Forum Club.

Fostoria—At a recent meeting of the Knights of Columbus, Dr. W. Gordon Hartnett gave a talk on the heart and the circulatory system.

Fremont—Dr. F. M. Teeple was recently re-elected health commissioner of Sandusky County.

Greenville—Officers of the Greenville Hospital staff for 1938 are: Dr. J. C. Mills, president; Dr. B. F. Metcalfe, vice-president, and Dr. J. R. Alley, secretary-treasurer.

Ironton—Dr. Anne Marting Alstott was the principal speaker at a recent meeting of the Century Club, Chillicothe.

Lima—Dr. and Mrs. William H. Parent celebrated their golden wedding anniversary recently.

Massillon—Dr. George N. Wenger reviewed the history of medicine at a recent meeting of the King Club, Navarre.

Van Wert—"Mental Diseases" was the subject discussed by Dr. R. E. Shell and Dr. H. E. Wilkinson, at a recent meeting of the Kiwanis Club.

Vermilion—Dr. F. R. Dew, Oberlin, and Dr. James Hewett, Elyria, were guest speakers at a recent meeting of the Rotary Club.

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Vol. 34 APRIL, 1938 No. 4

MODERN PULMONARY TUBERCULOSIS THERAPY

By PAUL M. HOLMES, M. D., TOLEDO, OHIO

THE therapy of pulmonary tuberculosis has changed radically during the last decade. From a relatively simple routine there has emerged a series of measures that require an accuracy of timing and judgment not hitherto called into play. No longer can we fall back upon a complacency based upon a fatalistic attitude of therapeutic frustration. Formerly when bed rest, fresh air, good food, and psychotherapy failed we were through. It is true that some men got better results with these methods than others, yet there was a general feeling of helplessness and dissatisfaction with results, that is largely responsible for our more effective modern methods of treatment. Used properly these older measures used by themselves still produce good results, and they form the foundation upon which newer methods largely introduced by the surgeons are based.

Simply stated, these added measures are designed to produce rest and relaxation of the diseased lungs and closure of cavities. These measures are designated under the general term collapse therapy which is inaccurate, because some of them merely immobilize the chest wall. At present these are the procedures, mostly surgical, in use: Artificial pneumothorax, phrenic nerve avulsion or crushing, pneumolysis (internal and external), scaleniectomy and scalenotomy, intercostal nerve paralysis, oleothorax, thoracoplasty, and a new addition, pneumo-peritoneum. From this formidable sounding list we must pick one or more procedures that, in our opinion, will enhance the patient's chance for recovery. What is done is largely a matter of individual judgment. The selection of a plan of treatment in a disease as complex as tuberculosis must be based upon many factors such as age and general fibre of the patient, and extent, activity and location of the disease. While no general rules can be made, yet there are a few guiding principles that can be used in deciding upon an effective plan of treatment.

Unfortunately many cases come under observation too late for any type of therapy. Collapse therapy should not be attempted upon the aged or infirm, the advanced bilateral disease with extreme emaciation, the hemotageneous or miliary types of infection, cases of debilitated general physical condition due to non-tuberculous disease, or in any instance as a method of last resort when the patient is in extremis. Collapse therapy is unnecessary in non-cavernous lesions that are

Submitted January 22, 1938, at request of the Editor.

The Author

● Dr. Holmes is a graduate of Ohio State University College of Medicine, 1914; Fellow, American College of Physicians, American College of Chest Physicians; medical director, Oak Ridge Sanatorium, Green Springs, and Williiam Roche Memorial Tuberculosis Sanatorium, Toledo; attending physician, Toledo Hospital; consultant, Robinwood Hospital and State Hospital, Toledo.

showing unmistakable evidence of healing. Some investigators have urged the use of artificial pneumothorax or phrenicotomy in minimal lesions and have produced some convincing statistics; but, in view of the uncertainty of the diagnosis and the risk involved, general opinion favors conservative methods coupled with careful observations, frequent X-ray examinations and if the lesion extends or is stationary to then use collapse methods. Trudeau Sanatorium found that 92 per cent of their discharged patients with minimal lesions were alive and well after 15 years. Very few of these patients ever require surgery. Careful watching usually finds them recovering completely upon bed rest and a good nourishing diet.

Excluding the advanced, the debilitated, and the recessive minimal types, there still remains a large number of tuberculous persons who can be partially or completely restored to health by modern collapse methods. Some sanatoriums report as high as 70 per cent of all admissions receiving collapse therapy in addition to regular institutional regime. In fact, the standards of eligibility for collapse therapy have been broadened to include all cases of unilateral or bilateral tuberculosis with cavitation whose vital capacity after the collapse will be sufficient to sustain life.

The objective of tuberculosis therapy today is largely the closure of cavities. Open cavities are dangerous, because they produce large quantities of sputum containing tubercle bacilli. The prognosis in an open cavity case is not very favorable, so that it is important to the patient and to society that it be closed by the safest and quickest methods possible.

With so many options and combinations to choose from and no rigid rules to follow, it is to be expected that some disagreement even among clinicians of abundant experience will occur. The sequence of collapse methods most generally approved is, first, artificial pneumothorax; second, phrenicotomy; third, internal pneumolysis; fourth, open pneumolysis; fifth, apicolysis; and sixth, thoracoplasty.

When a thoracic surgeon performs an operation upon the chest of a tuberculous patient, it is in the vast majority of cases due to the failure of conservative methods to bring about the closure of cavities. Many cavities are closed by artificial pneumothorax, but this happy result does not always occur. Pleural adhesions may plaster the lung to the chest wall, or only a partial collapse is possible due to adhesions that will not stretch enough to allow a complete collapse of the cavity-filled lung. An open cavity with collapsed lung all around it is the usual picture. The adhesions have a way of placing themselves directly over a cavity, thus holding it open. These specific bands of adhesions if small and not too plentifully supplied with blood vessels may be severed by electro-cautery through the thorascope and the procedure is called internal pneumolysis. Four authors, Welles, Matson, Jacoboeus (the originator of the method) and Unverricht, reporting upon 831 cases of internal pneumolysis showed satisfactory results in 75 per cent with all cavities closed. Larger adhesions are severed through an opening in the chest wall, thus permitting ligation of the stumps which prevents hemorrhage into the thoracic cavity. This latter technique, open pneumolysis, necessitates the resection of one or more ribs and results in a high percentage of pleural exudates which must be carefully managed if the collapse is to be maintained. Very often the whole apex is adherent, which requires the stripping of the apical parietal pleura from the chest wall and insertion of muscle, fat, gauze, rubber or parrafin into the space between ribs and pleura, thus applying pressure which closes the apical cavities. This operation is termed apicolysis and requires the resection of one or more ribs to be thoroughly effective. The above methods are the ones most frequently used as adjuncts to an incomplete artificial pneumothorax.

For those cases that are eligible for collapse but where artificial pneumothorax has been impossible due to extensive adhesions, the following surgical procedures may be used:

(1) Removal or crushing of the phrenic nerve. When the phrenic nerve is crushed or a section removed, the diaphragm which this nerve supplies is paralyzed and comes to rest in an elevated position well up in the thoracic cavity. The higher the diaphragm ascends, the better the clinical result because of the increased lung compression. This elevation of the diaphragm gives about the same amount of compression that would be produced by the induction of 300 to 500 cc. of air by artificial pneumothorax. One's opinion as to the indication for and the value of the operation may vary greatly, depending upon the clinical center one happens to be in; for instance, O'Brien reports 82 per cent of 378 cavity cases having satisfactory results by this operation alone, and on the other hand Herbert says that of 61 cases he had treated by phrenic paralysis only nine had their cavities closed. My experience with the operation leads me to favor the temporary phrenic paralysis over the permanent. If no improvement is apparent in the six months that a phrenicotomy paralyzes the diaphragm, none is apt to occur later, so nothing would be gained by a permanent paralysis. The operation can be repeated if improvement occurs and more time is required. The retention of diaphragmatic function is important, particularly if thoracoplasty is contemplated as a later possibility. From a conservative group of investigators reporting on a thousand phrenic nerve palsies, about 50 per cent are given a favorable

rating on end results. Accurate appraisal of results is difficult, because the operation is used so frequently on minimal lesions that will heal without it and in conjunction with other procedures, such as artificial pneumothorax and thoracoplasty. Nevertheless, the method has a definite value in lesions located in the lower lobes and as an aid to pneumothorax, thoracoplasty, and the intercostal nerve palsies.

(2) **Multiple intercostal neurectomy.** This operation consists in the resection or crushing of all the intercostal nerves on the affected side. Because it paralyzes the intercostal muscles, it produces an excellent immobilization of the chest wall, especially when the scalene muscles are also severed. Since it cannot effect any collapse of the lungs, its field of usefulness is limited to cases where nothing more could be safely attempted or where immobility of the chest wall is considered enough.

(3) **Scaleniectomy.** This operation has a very limited place in collapse therapy, and because of its operative technical difficulties and risks rarely will be used. The fibres of the three scalene muscles are divided, thus immobilizing the upper ribs. Coupled with a phrenicotomy and intercostal neurectomy, complete immobilization of the chest wall results. Collapse of the dome of the apex may be obtained by the resection of the first two or three ribs.

(4) **Oleothorax.** Here one of the oils, paraffin, olive, cotton seed, or gomenal, properly sterilized, is injected into the pleural cavity. The purposes are first, to prevent an obliterative pleuritis from destroying a pneumothorax, and second, to control a tuberculous or mixed type empyema. Other rather far-fetched indications have been proposed, such as stabilization of the mediastinum, closure of broncho-pleural fistulas, etc., but thus far insufficient proof has been produced to warrant the use of oil therapeutically, except for obliterative pleuritis and tuberculous empyema.

(5) **Pneumo-peritoneum.** Many researches are being done to determine the value of the injection of air into the peritoneal cavity. As an aid to a collapse therapy plan, it is thought that the rise of the diaphragm produced by this procedure will be helpful when used with pneumothorax or a phrenic paralysis.

(6) **Thoracoplasty.** This operation is the resection of enough ribs in their entirety to collapse cavities. The ribs are resected extrapleurally along with the transverse processes of the vertebrae so that the pleural cavity is not entered. The modern operation is done in multiple stages, which, in my opinion, is largely responsible for the drop in mortality. The operation formerly carried a high mortality, often running as high as 40 per cent. However, in recent years due to perfection of technique and the adoption of the many stages operation, the mortality has been reduced to less than 5 per cent. Of 132 patients operated upon by Alexander during the last three years, 119 are living, 80 per cent of these having negative sputum, and only 13 are dead. Other thoracic surgeons, O'Brien, Corylloss, Hedblom, and Head, report equally brilliant results. Alexander has concluded "that the modern operation has proved itself capable of completely closing cavities and rendering sputum negative in 80 per cent of the patients for whom thoracoplasty was indicated." The drop in mortality has been accomplished in spite of a more liberal attitude in the selection of cases. Formerly only "good chronics" were chosen. They were well nourished, fever-free, looked normal but carried a positive sputum. Now the contra-indications are limited; even bilateral cases with pneumothorax on the opposite side are operated successfully.

The results of collapse therapy methods must convince even the most sceptical, because each new series of cases only adds further proof that these procedures are saving the lives of a great many patients otherwise doomed to die. Nisson, for example, reported upon 100 uncollapsed cases that 50 died within a year, 30 in two years, 10 in three years, and only 10 survived over four years. He reported upon 100 similar patients who had thoracoplasty that 50 were well and able to work within two years and were without cough, sputum or fever, 10 more were alive after ten years and greatly improved, and the rest had died from the operation or from other causes.

The scope of collapse therapy undoubtedly will be increased as more and better trained surgeons interest themselves in this very important branch of their specialty.

CONCLUSIONS

(1) Every case of pulmonary tuberculosis should be studied carefully with the idea of utilizing modern collapse therapy methods where indicated.

(2) The sequence of methods should be from the simple to the more complex.

The simple measures should be tried first, but as soon as it is apparent that the method is ineffective, do not procrastinate; move on to the next least hazardous procedure that offers a hope of cure.

316 MICHIGAN STREET.

The facts of today were fancies of yesterday and will be memories tomorrow. Practically every deed was once a dream; every invention once an act of imagination.—Fetterman.

GASTROSCOPY AS A DIAGNOSTIC AID

By E. A. MARSHALL, M. D., CLEVELAND, OHIO

I FEEL very keenly the necessity for interesting everyone who sees gastro-intestinal problems in gastroscopy, which, although it is older from an historic point of view than roentgenography, has as yet not reached any degree of prominence as a diagnostic procedure in this country.

Added to the fact that everything new in medicine meets with a certain degree of resistance, I feel that the expense of the instrument and the absolute necessity for training under a competent man are the most potent reasons for this condition. The latter factor must be stressed. It is one thing to use an X-ray machine while learning its technical difficulties, always being able to send the difficult case across the street to the trained man, and quite another to pioneer with an altogether new diagnostic instrument with the eyes of one or more staffs on the operator. The attitude of such groups is far from credulous and they are not disposed to treat lightly any mistakes which are made by the operator whether he is trained or not, though they are very prone to lay these errors at the door of the instrument because it is new. Such an attitude toward the scalpel would seriously have interfered with the program of surgery and will just as seriously interfere with the progress of diagnostic gastroscopy.

Schindler[1] divides gastroscopy into four periods. The first began with Kussmaul in 1868 who attempted to pass a straight rigid tube into the stomach. Because he had no light, his observations were of little value. But it must be admitted that this represented the start of the work which culminated in today's gastroscope. Campbell, of Glasgow, is suppposed to have tried the same thing a few years before, using as his first patient a sword swallower, but failed when the sword swallower is supposed to have said: "I know I can swallow a sword, but I'll be damned if I'll swallow a trumpet!" Eleven years later, Nitze, after constructing a cystoscope, attempted the construction of a gastroscope. He had no Edison bulb and used a water cooled platinum loop which was one of the reasons he failed.

The second period in gastroscopy began with Mikulicz in 1881 who constructed a tube with a 30° angle on the bottom to facilitate passing the cardia. Because of this he had to use two instruments, one for the left and one for the right side since it could not be rotated. He foresaw many of the problems of gastroscopy and his papers are the outstanding ones of the last century. He thought of the use of prisms but found that each one absorbed half the available light and for that reason could not be used.

Then came a number of men with their own ideas as to the construction of a gastroscope. Rosenheim, in 1895, had a rigid instrument with an Edison bulb. Kelling, 1897, used a flexible tube made rigid by wires. He had been a pupil of Mikulicz. Kuttner, in the same year, used a jointed tube which could be straightened by turning. Jackson, of this country, began working with the open tube in 1907. This method is still of value in the removal of foreign bodies. Between 1907 and 1911 a few more men attempted to construct their own instruments, but all of them met with little or no success.

In 1920, when Schindler first became interested, all work along this line apparently had been given up. He constructed a straight, rigid instrument consisting of three parts: an outer tube containing the air channel within which an obturator carrying a rubber finger might be placed which would permit safe introduction of the outer tube after which, the obturator being withdrawn, an optical tube could be inserted. I have used this instrument in examining dogs and it is quite satisfactory from point of vision, but it is far from safe as is shown by the fact that even Schindler had some esophageal accidents. Nevertheless, with this instrument Schindler studied endoscopic views of the stomach for 12 years and his book, as well as his papers, did much to keep the interest in gastroscopy alive, and he has a perfect right to call this the third period in gastroscopy.

The fourth or present period began with the invention of the flexible gastroscope. Almost every subject in present day gastroscopy revolves around Schindler because he has either taught or instructed the teachers of practically all gastroscopists. Schindler was able, in 1932, with the aid of Wolf to construct a tube approximately half rigid and half flexible which would convey light rays from a prism eye on the end through a system of lenses to the operator's eye, if necessary bending them through an arc

Submitted January 22, 1938.

The Author

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not to exceed 34°. He used air to distend the stomach and an eight volt lamp to illuminate it.

Through such an instrument I have had the interesting experience of observing, in the gastrointestinal clinic at Huron Road Hospital, the mucous membrane of 151 stomachs. I realize that the number of these experiences is all too few to permit me to render an opinion of any value, but I have tried to color this opinion with the experiences of men who have seen many more cases. With regard to the technique[2] of the examination—the patient appears in the morning without food or water. His throat is swabbed with a 2 per cent pontocaine solution on a curved applicator. This is followed immediately by the introduction of a tube containing numerous small holes and the same solution is forcibly sprayed against the mucous membrane of the voluntary controlled portion of the esophagus. This local anesthesia with the aid of a hypodermic of one grain of codein and 1/100 grain of atropine constitutes the preparation of the patient so far as analgesia and relaxation are concerned.

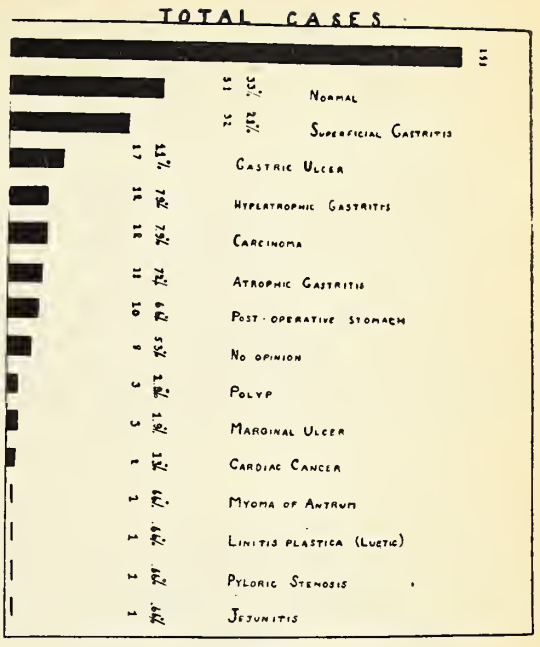


Chart 2

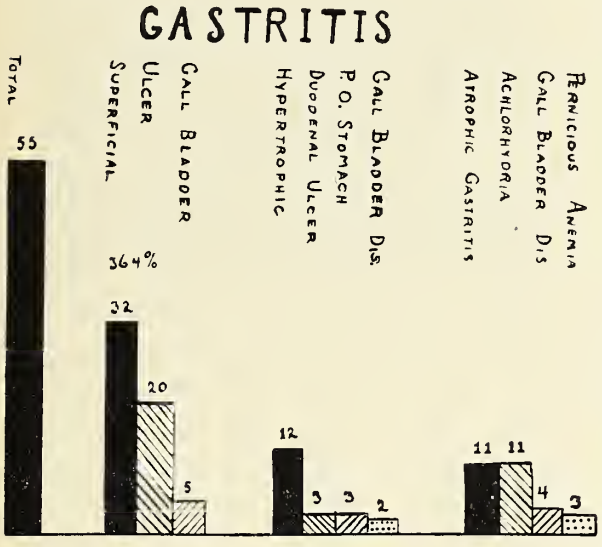


Chart 1

Then, after demonstrating the position to the patient as a part of a psychologic preparation, an Ewald tube is passed and the patient is placed in a modified Trendelenburg position which permits the retained gastric secretions to flow into a vessel at the end of the tube. Although this tube serves the highly necessary purpose of emptying the stomach it also serves to reassure the operator as to the integrity of the esophagus and to reassure the patient as to the simplicity of the examination.

This being done, the operator demonstrates the left lateral position necessary for gastroscopy, and the patient assumes this position, permitting his head to be held by the first assistant who performs the very necessary and important function of straightening the head during the passage of the gastroscope, the introduction of which is begun with the gastroscope at right angles to the long axis of the body and rapidly but gently passing to the deepest part of the stomach, the slender finger-tip finding its way through the cardiac portion and bending the flexible portion of the gastroscope on striking the posterior wall of the stomach.

Once in the stomach at the greatest depth, the light is turned on and a small amount of air is injected. The lens may be cleaned at any time by rolling it over the posterior wall. The gastroscope usually has to be withdrawn from depth 1-A to depth 1 before a round picture can be seen. Here, with the light in the ten o'clock position, one may view the antrum which has fallen anteriorly as a result of the patient's position and is partially obscured by a fold called the angulus, better known to radiologists as the incisura. The mucous membrane is orange-red normally and the antrum should be almost free of folds except those which occur as a result of peristalsis. The pylorus will be seen as a small dark hole at the back of the antrum and two types of motion predominate, one in which it approaches the gastroscope the while closing, and the other beginning with a wave back of the angulus and causing the pylorus to recede from the gastroscope as it closes.

Peristalsis is but one of four movements to be dealt with while viewing the stomach. The others are pulsating, synchronous with the heart beat and the very important respiratory which causes the angulus to move up and down enabling the



Fig. 1. Pylorus open. The angulus is seen at the top of the picture. Beneath it we see the normal antrum with pylorus receding as it closes. Depth 1.



Fig. 3. Normal greater curvature. Note the lack of regularity of the rugae and their relative shallowness on the anterior wall. Depth 2.



Fig. 2. Pylorus closed. The "rosette" appearance seen here has not been commonly found. Depth 1.



Fig. 4. Superficial gastritis of the posterior wall. Two erosions are seen near the middle of the picture. These posterior wall rugae appear larger because of their close proximity to the prism. The mucous membrane has an increased redness and a dirty yellow exudate. Depth 2, Case 141.

operator, with the aid of the peristaltic action, to get a view of all but a small portion of the lesser curvature of the antrum. The last movement is one of tension which frequently must be "waited out" in order to get a view of the lower part of the stomach and often causes the novice to inject so much air that he balloons the antrum out of sight.

Withdrawing the instrument until the angulus has just disappeared, the gastroscope is said to be in position or depth 2. From this position the body may be observed completely except for the small part on which the gastroscope lies. The orange-red color predominates normally and the rugae are found to vary with the part of the body observed. The lesser curvature is almost always smooth. A meshwork type of light rugae are found on the anterior wall, whereas the same type of heavy rugae characterize the greater curvature and the posterior wall. In this position sufficient air may be used to balloon all parts of the stomach away from the objective and light.

Depth 3 finds the objective just inside the cardia where a view of the fornix holding the unemptied residue "mucus lake" may be seen and the only blind spot here is the small part around the corner from the cardia where the stomach wall passes in the direction of the heart. The size and shape and color of the rugae correspond to like positions in the body.

After following this technique the gastroscope is slowly and carefully removed and the patient is permitted to sit up and eructate the air which gives him almost the only distress he experiences during the examination. The patient then demonstrates the fact that gastroscopy is an office procedure by walking from the table to his occupation unless his disease hinders him.

There are, of course, certain contraindications[3] to the employment of endoscopic examination of the stomach. They may be numbered thus:

1. Uncooperative patients.
2. Aneurysm of the aorta.
3. Esophageal varices.
4. Obstruction of esophagus.
5. Recent corrosive poisoning.
6. Phlegmonous gastritis.
7. Penetrating ulcer.
8. Angina pectoris, cardiac decompensation, psychosis.
9. Scoliosis or kyphosis.

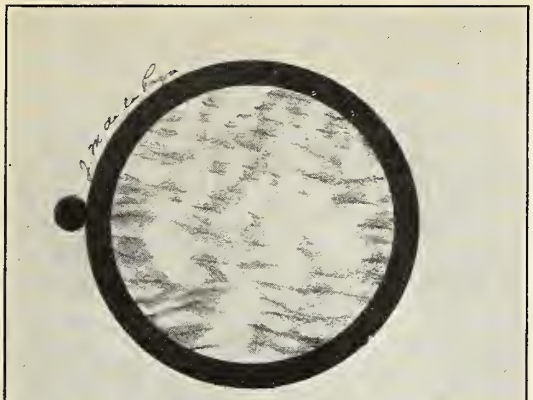


Fig. 5. Superficial gastritis anterior wall. The rugae are normal in size. The mucous membrane is reddened and partially covered by thick mucopurulent exudate. Here approximately 100 sq. cm. of membrane are seen. Depth 2, Case 53.

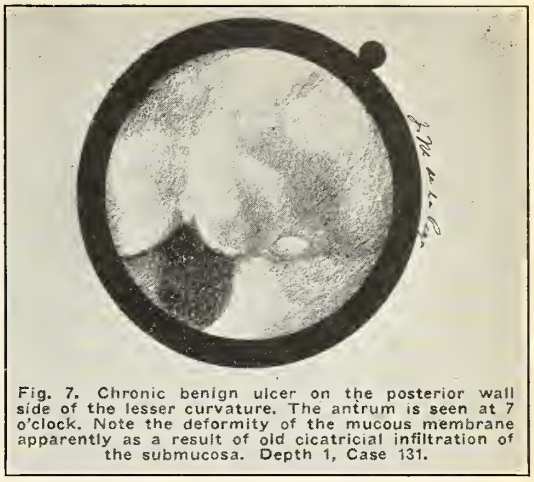


Fig. 7. Chronic benign ulcer on the posterior wall side of the lesser curvature. The antrum is seen at 7 o'clock. Note the deformity of the mucous membrane apparently as a result of old cicatricial infiltration of the submucosa. Depth 1, Case 131.

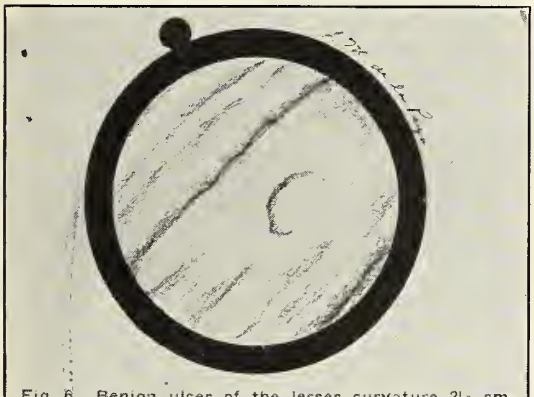


Fig. 6. Benign ulcer of the lesser curvature 2½ cm. in diameter. Location and size confirmed by x-ray. Normal mucous membrane surrounding a yellow "punched out" area. Observed four times in eight weeks when it was found to be healed. Depth 2. Case 95. Depth 2, Case 95.

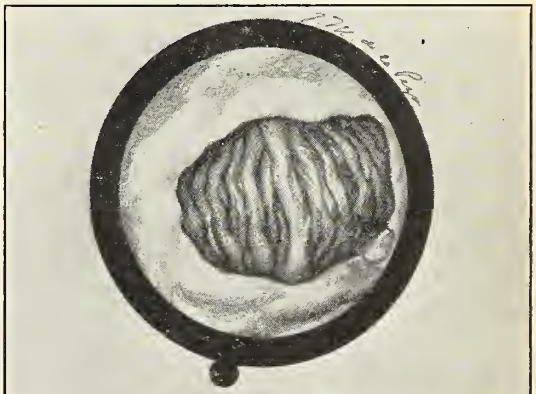


Fig. 8. Marginal ulcer. Looking at a gastroenterostomy stoma high in the stomach near the greater curvature through which can be seen the mucous membrane of the small intestine. Where the proximal loop joins the stomach a large ulcer can be seen. This ulcer was bleeding when observed. Depth 3, Case 130.

So far as the indications[4] are concerned anyone who has observed gastroscopy feels that it should be routinely used in gastro-intestinal disease. There are, however, certain definite indications. They follow:

1. Gastric ulcer.
2. Gastric cancer.
   a. To confirm diagnosis.
   b. To determine operability.
3. Duodenal ulcer.
4. Syphilis.
5. Gastritis.
6. Unexplained weight loss.
7. Gastro-intestinal hemorrhage.
8. Pernicious anemia.
9. Unexplained vertigo.
10. Allergy, especially with skin manifestations.
11. The presence of enteritis and colitis.

The gastroscope may be said to be the only method by which inflammatory lesions of the gastric mucous membrane may be diagnosed. Schindler[5] has simplified the problem of the classification of gastritis by sub-dividing it into three classes depending upon the external appearance of the mucous membrane. The importance of these lesions is evident in even this small series of cases where, while 33 per cent were normal, 36.4 per cent were found to fall into one of the three classes of gastritis. The first class Schindler calls superficial, it being characterized by a reddening of the mucous membrane, an edema which increases the highlights and frequently, although not necessarily, superficial erosions which may or may not be hemorrhagic. This is the more common type and the least serious and was found in 21 per cent of this group.

The second division is that of atrophic gastritis which causes the mucous membrane to lose its color, becoming grayish green. Instead of being edematous, it is frequently so thin as to permit visualization of submucosal blood vessels. This is the type found in severe pernicious anemia and may represent the end result of superficial gastritis. This group comprised 7 per

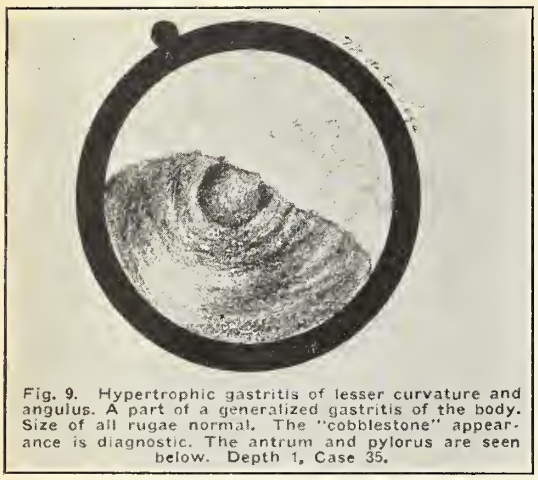


Fig. 9. Hypertrophic gastritis of lesser curvature and angulus. A part of a generalized gastritis of the body. Size of all rugae normal. The "cobblestone" appearance is diagnostic. The antrum and pylorus are seen below. Depth 1, Case 35.



Fig. 10. Carcinoma of the greater curvature near the cardia. The usual concavity of the fornix is here filled with the mass covered with reddened mucous membrane and exudate. Specimen taken by esophagoscope found to be adenocarcinoma. Depth 3, Case 138.

cent of the 151 patients. Every one of these stomachs showed achlorhydria functionally.

The third division Schindler calls hypertrophic gastritis. It is characterized by a deepening of the red color and a mottled or "cobblestone" appearance. It is the most severe, most difficult to treat and frequently is accompanied by erosion and hemorrhage. It is the type found in the post-operative stomach usually and seems almost always to result unless the stoma develops a sphincter action. Such a lesion was found in 12 cases or 7 per cent of the series. Not one of these stomachs showed enlarged rugae, although this diagnosis is frequently made by the radiologist because of the size of the rugae.

Gastric ulcer is the least likely lesion to be overlooked because it stands out with its yellow floor, depressed edges and sharp margin. It is usually easily differentiated, even by the relatively inexperienced, from malignant ulcerations. We found gastric ulcer in 17 cases in a group where a provisional diagnosis of duodenal ulcer was only made 31 times, thus placing the ratio of gastric to duodenal ulcer 1 to 1.8 instead of the much higher ratio frequently quoted. One naturally comes to feel that it is possible to miss gastric ulcer by X-ray. In the cases which had had previous posterior gastroenterostomy we were able to see the marginal ulcer in three instances. This experience is not the rule because the stoma is usually seen obliquely or not at all, it being on the posterior wall where a fold may blind the objective.

Gastric carcinoma has a very typical appearance. The walls appear rigid and the mucosa membrane is stiff. If it is the ulcerative type, the ulcer is uneven with ragged, elevated margins and the floor is nodular, frequently dirty grey in the areas which have undergone complete degeneration and hemorrhage is the rule. Frequently in obstruction food remnants or flakes of barium may stimulate a necrotic area and with the uninitiated the chance is greater that they will diagnose lesions which do not exist than miss a relatively advanced lesion. Because the edge of a cancer may be observed, it is usually possible to discern the extent of involvement and thus prognose the operability of gastric carcinoma.

In 12 cases gastric carcinoma was observed and all but two, possibly three, were inoperable. We feel that the whole group of examinations would have been justified to discover two cases early enough to operate.

We have had one case which appeared radiologically to be an involvement of the antrum only, but gastroscopically the lesion proved to be far more extensive and was called inoperable. Operation showed a lesion so extensive that nothing could be done except to close the abdomen. It is Schindler's opinion that the gastroscope and the X-ray together should supplant exploratory laporotomy in so far as lesions of the stomach are concerned.

That the gastroscope may aid the surgeon in many ways in addition to differentiating malignant from benign tumors was brought out by Schindler and Giere[6] in a recent article. It can decide the cause of pyloric obstruction and visualize the size of the opening. It can investigate the hour-glass stomach, follow the progress of a healing ulcer and find the marginal ulcer. It probably will eventually tell him where he must place the stoma of a gastroenterostomy in order to escape the much dreaded chronic post-operative gastritis. Barnett says: "Earlier diagnosis of gastric malignancy and the utilization by the surgeon of gastroscopic criteria will inevitably improve surgical results. This will engender in both physicians and the public a more watchful, hopeful attitude with a greater confidence in gastric surgery. The fight against gastric cancer will then take its place along with the brilliant and successful campaign against malignancy of the uterus and breast."

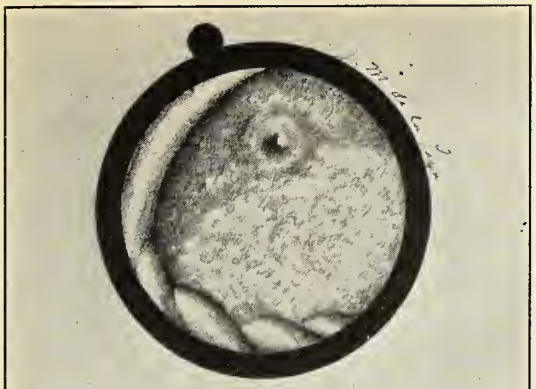


Fig. 11. Carcinoma of the antrum, annular in type. Note the rigid appearance of the antrum and pylorus. The angulus is seen above, the "rope like" musculus epchincter antri below. Depth 1, Case 71.

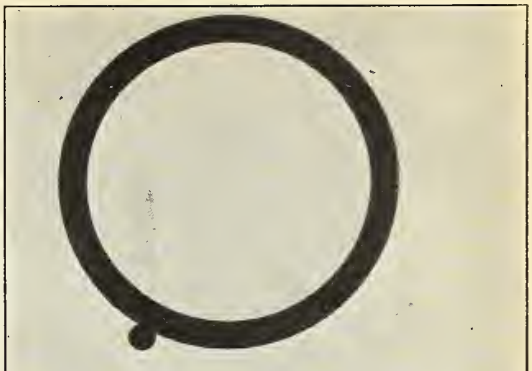


Fig. 12. Atrophic gastritis of the anterior wall. The mucous membrane is thin and devoid of rugae. The color is grayish green on a pink base. In pernicious anemia. Depth 2, Case 150.

Gastroscopy can never hope to compete with X-ray and it would be regrettable if such an attitude were adopted by men on either side. The two methods are complementary and neither can completely examine the stomach without the other. In comparing the two methods X-ray has the advantage—especially in the hands of a skillful operator who can make use of mucosal relief technique and pressure. It brings out rather well the few lesions which occur in the so-called blind spots of the gastroscope. In the hands of a Schotsky it can reassure us as to the integrity of the esophagus. It can pass farther down and demonstrate niches, as has been proved by Templeton in 95 per cent of the cases of duodenal ulcer. It can bring out lesions of the lower intestinal tract.

Sixty-six or 43 per cent of our cases had stomach radiographs either before or after the gastroscopic examination. The gastroscope either differed with the X-ray or added to its diagnosis in 35 instances or 53 per cent. It agreed with the X-ray in 19 cases or 29 per cent. The X-ray picture failed to show gastritis in 20 cases, ulcer in five cases and carcinoma in three cases. It must be added in fairness to X-ray that many of these cases came from private offices where expert technique may or may not have been used and in addition it should be noted that the X-ray made the diagnosis and the gastroscope failed in 20 lesions, most of them extra-gastric.

The gastroscope makes a good check on X-ray. What the X-ray operator feels is carcinoma may be a benign tumor or barium between normally large rugae or folds.

In hemorrhage the gastroscope is very valuable.

Our series contained 51 normals, two of which had had food which we were able to observe leaving the stomach. We had three cases of severe anemia, secondary in type, without atrophy which showed a pink mucous membrane instead of the grayish-green appearance. We had more cases of atrophic gastritis without pernicious anemia than those with it. Over one-third of our cases of superficial gastritis had known gall bladder disease which leads to the problem of whether the gall bladder disease is a factor in this stomach lesion.

Only about one-half of the cases of ulcer showed superficial gastritis. This is in line with the experience of men who have done large numbers of gastroscopies and differs with the opinions of most pathologists who claim that gastritis is always present in ulcer cases. This is probably because they base the normal pathological picture on the stomach of the youth which must receive many insults before it reaches the ulcer age. These insults, although producing pathologic changes in the submucosa in the form of lymphocytic infiltration and connective tissue changes, still may permit the mucous membrane to heal and have the normal appearance and function while the pathologic picture remains.

We therefore feel that the gastroscopist is the more likely of the two to be correct in his belief that one need not necessarily have gastritis in ulcer.

In four resected cases jejunitis appeared in one and jejunitis and gastritis in another. One showed recurrent carcinoma and one a silk suture dangling in the cavity. Three cases of polyp were seen and one case is to be examined in the near future because of having the appearance of a myoma in the antrum.

We failed to see the pylorus in 31 cases but previous operation or disease interfered with its visualization in 11 instances so that failure occurred in 13.2 per cent of the group. It is certainly difficult to render an honest opinion regarding the whole stomach when this important part has not been seen. Certainly faulty technique interfered in the first examinations because in the last 70 cases the pylorus has evaded the objective only six times, leaving a percentage of

8.5 failures, an improvement of nearly 40 per cent.

We can only think of the future of gastroscopy with enthusiasm. Its importance in gastric hemorrhages, diagnosis of cancer, both as to presence and operability, differentiation between cancer and ulcer and progress of healing ulcer cannot be minimized. We can see no way of diagnosing any of the inflammatory lesions by any other method.

We feel that the gastroscope is an instrument which should be used by the internist and that gastroscopy is a field which should never become a specialty because of the importance of knowing the physiology of the stomach in health and disease.

We trust that it will never be made to seem to compete with X-ray and hope that over-enthusiasm and lack of training on the part of men operating the gastroscope will not bring discredit to this useful diagnostic instrument.

5005 EUCLID AVENUE.

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Congenital Absence of the Vermiform Appendix: Case Reports

By C. M. RAMBO, M.D. and LESTER LASKY, M.D.,
ZANESVILLE, OHIO

CONGENITAL absence of the vermiform appendix is conceded to be a rare anomaly in man. Approximately 50 cases have been recorded since Morgagni[1] reported the first in 1719.

A number of these cases are questioned by various reviewers of the literature. According to the reviews of Schridde[2], Dailey[3], Spivack[4], and Green and Ross[5] the number was approximately 29. More liberal reviewers as Dorland[6] and Bradley[7] admitted 37 and 40 cases, respectively. Darrah[8] in his comprehensive review of 1936 speaks of the ultra critical reviewers who found only 28 whereas other reviewers of the same literature extend the number to 49.

More than one-half of the cases reported were discovered on the operating table. Post-mortem examination naturally is more conclusive than examination at surgery, yet the findings of surgeons of known ability cannot be disregarded. Frequently their search had been so zealous as to result in injury to the caecum and ascending colon, and ultimate death.

We would like to submit the following two cases, the first occurring in the practice of the senior author, and the second in the practice of the junior author.

Submitted January 25, 1938.

P. C'M., white male, age 18. Admitted to Bethesda hospital on June 4, 1935 (#497). Preoperative diagnosis: Acute appendicitis. Operation: Paramedian incision. The distal ileum was found to be continuous with the ascending colon. No caecum or appendix present. The mesenteric glands in that region were enlarged. The closure was routine. The patient was dismissed on the sixteenth day. Post-operative diagnosis: Congenital absence of both caecum and appendix.

G. R., white male, age 22. Admitted to Good Samaritan hospital on August 15, 1937. Preoperative diagnosis: Acute appendicitis. Findings on examination: Temperature 99°, leucocytes 10,000, differential; polymorphonuclears 78 per cent and staffs 7 per cent. Localized tenderness in the right iliac fossa. Operation: Right paramedian incision, caecum was delivered through the wound. No appendix was found. The caecum was freely movable, as was the ascending colon for a distance above the iliocaecal valve. The entire mesentery was transilluminated. No evidence of an appendix, either diminutive or obliterated could be found. The confluence of the longitudinal bands was on the anterior side of the caecum. It was noted that the glands in the mesentery of the caecum and ascending colon were enlarged and inflamed. The closure was routine. Recovery uneventful.

The patient was dismissed from the hospital on the twelfth post-operative day.

Post-operative diagnosis: Congenital absence of the appendix.

SUMMARY

Two cases of congenital absence of the appendix are reported.

53 SO. FOURTH STREET.

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We have come to feel that when for any reason, the eclamptic woman is to have labor induced, or artifically terminated, it is vitally important first to control the convulsive seizures by effective cerebral dehydration, and to reestablish a safe fluid-balance before interfering in any way with the pregnancy or labor. This, in our judgment, applies with especial emphasis to the question of Caesarean delivery—a procedure which we have not done (for eclampsia) since the adoption of these methods. If we were to encounter an eclamptic patient in whom Caesarean delivery would be indicated, regardless of her attacks, we would most certainly control her convulsive seizures before subjecting her to a major operation. —J. O. Arnold, M.D., Philadelphia; The Jr. Ind. State Med. Assn., Vol. 30, No. 12, Dec., 1937.

INTRACRANIAL ARTERIOVENOUS ANEURYSM

By GILMAN D. KIRK, M. D., Columbus, Ohio

ARTERIOVENOUS aneurysms are somewhat of a clinical rarity, and yet the most common type is that type under discussion; namely, the arteriovenous aneurysm occurring between the internal carotid artery and the cavernous sinus.

It is estimated that 75 per cent are of traumatic origin; and when one stops to consider that there are about 120,000 skull fractures in the United States every year, it is probable that this syndrome will increase in the future. It is also likely that some basal skull fractures that die might develop this lesion if they had survived. In order to fully appreciate the treatment and symptoms of this condition the anatomy of the vascular system in this region should be reviewed. In the first place, in order for an arteriovenous aneurysm or fistula to occur a large artery and vein must be in contiguity. This anatomical situation does not exist in the brain except where the internal carotid enters the skull and passes through the maze of venous sinuses known as the cavernous sinus. In this place the arterial wall helps form the venous wall. The cavernous sinus is protected on its medial wall and the superior and inferior petrosal tributaries have thick resistant dural coverings as have the cross connections to the other side and the sinus itself. The ophthalmic vein is the only tributary which possesses normal thin vein walls and is embedded in loose areolar tissue. Consequently it dilates from the arterial pressure it must carry and causes pulsating exophthalmos.

Therefore, if one postulates a basal skull fracture through the middle fossa, the injury may be imparted to the carotid arterial wall and result in a tear in the wall which thus forms a fistula into the veins in contiguity or, with less force, may result in a weakening of the wall so that the fistula occurs not at the time of the injury but two to three weeks hence, which is a common time for the symptoms to develop. This is probably due to an aneurysm of the internal carotid artery which subsequently ruptures through into the cavernous sinus, i. e., it is anatomically protected from dilatation at all places except adjacent to the vein, where it balloons out and ruptures. The same mechanism probably occurs in the acquired type of aneurysm without precedent traumatic history. Therefore, where the fistula occurs arterial blood is forced through the opening into the cavernous sinus; and the result is a marked increase of venous pressure in the surrounding veins, which is clinically exhibited by dilatation of the extensive venous plexus supplying the orbit, with a resultant exophthalmos of the affected eye, a bruit both palpable and auscultatory over the veins of the eye; and the symptom that brings the patient to a physician, the intensely annoying buzzing in the patient's head.

Submitted January 26, 1938.

The Author

● Dr. Kirk is a graduate of Ohio State University College of Medicine, 1934; member Alpha Omega Alpha; instructor in surgery, Ohio State University.

It is historically interesting that Hunter described the first arteriovenous aneurysm—one occurring in the arm—but that Travers described and treated the first case 128 years ago in 1809, without benefit of anesthesia, by ligation of the carotid artery. His patient, a woman 31 years of age, remained much improved for seven years, although she was still able to notice the bruit at night while lying on the affected side, indicating that the fistula was not completely occluded at any time although she was symptomatically cured.

In 1835 Baron found at autopsy that a sinus existed between the internal carotid artery and the cavernous sinus, and not an aneurysm of the ophthalmic artery, as Travers had postulated; i. e., that it was an intracranial rather than an extracranial lesion. In 1907 de Schweinitz and Holloway assembled all previously reported cases, making a total of 313, and showed that although the former mechanism is the most frequent that an aneurysm of the ophthalmic artery or tumor of the orbit do cause a certain number.

In 1924 Locke assembled all cases on record and included his own three cases to make a total of 588. At present, there are something over 800 reported cases.

The purpose of this paper is to report three cases on record in this hospital, two of which we have had this year and one other probable case which went to another clinic for further consultation, and to discuss some of the intrinsic difficulties of treating this condition successfully.

There have been a number of methods of treatment devised for this condition consisting of therapeutic procedures which tend to prevent the short circuit of arterial blood to the venous side. This may be done (1) by producing stasis or obstruction on the afferent arterial side by ligation of the carotid artery; or (2) by stasis or obstruction to the afferent veins by ligation or compression of the superior ophthalmic veins; or (3) by promoting clot formation at the site of

the fistula by sclerosing injections of various types.

Successful ligation of the carotid artery is first dependent upon the unusual circulatory supply of the brain through the circle of Willis formed by the two internal carotid arteries and the basilar artery; and beneficial results depend on diminution of blood supply through the fistula without decreasing it enough to cause hemiplegia or death. To reduce this danger selected periods of carotid compression should be instituted daily. This should not be too prolonged, especially in young individuals, because it tends to increase collateral and anastomosing circulation and decrease the likelihood of success with permanent ligation. Generally, this should not be less than one week for young individuals nor more than three weeks for older individuals.. If at the end of this time permanent occlusion has not occurred, ligation of the artery should be resorted to. If sensory or motor signs develop or headache with cessation of bruit a course of compression should be instituted until pressure occlusion for one hour may be borne without untoward symptoms. If compression tests neither stop the bruit nor cause cerebral anemia ligation is unlikely of success. The other immediate danger attendant upon ligation is the extension of the thrombus or an embolus occurring some days after the operation; and the best method of minimizing this danger is complete quiet bed rest for a week after operation. The ligation should be sufficient to occlude the artery but not injure the walls of the vessel. Mont Reid discussed the ligation of large vessels in Surgery, Gynecology and Obstetrics, recently.

Should ligation of the carotid artery fail, ligation of the opthalmic veins should next be attempted but not by any means at the same sitting nor with any idea that a mortality rate does not also exist with this procedure.

Dr. Dandy reports another method (in Archives of Surgery, Nov. 1, 1935), which again illustrates his technical skill and boldness in neurosurgery. This method is to be used only after failure of total ligation of the common or internal carotid artery. He suggests this as a safer method than bilateral ligation, which has been used but attended by a high incidence of disastrous results. In his method he makes a frontal or hypophyseal approach and after elevating the frontal lobe ligates the carotid artery with a silver clip just before it divides into its terminal anterior and middle cerebral arteries. At this location the ophthalmic artery has already branched off. Dandy has used this method successfully in two cases and in his own words says: "Intracranial ligation of the internal carotid artery is advocated only when all the other arterial ligations have failed to cure."

The following cases illustrate the typical syndrome of pulsating exophthalmus:

Case I—A 37-year-old white male laborer entered the hospital complaining of pain in the left eye and diplopia with swelling of the left eyelid and a buzzing in his head. He stated that one year previously he noticed that there was some irritation in the left eye; it became red and injected. About six months later he noticed a throbbing in the left temple with progressive enlargement of the left eyelid, as well as a marked dilation of the vessels of the left eye. His vision gradually failed; about one month ago the right eye became reddened and painful. Although he has had severe pain in his left eye it is not general and occurs infrequently. He can recall no incidents which might have contributed to this condition, including trauma.

On physical examination if the internal carotid artery is compressed against the vertebra by the thumb of the examiner, the swelling disappears, the exophthalmus decreases, the vessels disengorge, the palpable bruit ceases and he apparently recovers without any other symptoms of anoxemia to the brain. Upon release of pressure there is a sudden shooting pain in the left eye and the syndrome reappears.

Under local anesthesia the carotid artery was exposed and freed from its sheath. A gauze tape and a double linen ligature were set in place, the tape was twisted and the artery obstructed for one hour. At the expiration of this time there were no untoward symptoms other than relief of the complaining symptoms. The gauze tape was then removed and the internal carotid ligated with the linen sutures. On the evening of operation he noticed return of some pain in the left eye and subsequently some noise in the head with slight swelling of the eye. However, this improved and on the tenth day he was discharged, much improved.

Patient was seen eight months following operation and states that he can hear buzzing only faintly at night when lying on affected side. He complains that vision in the left eye is poor, but his eye was examined by an ophthalmologist who states that it is normal except for L. R. weakness. There is slight congestion of veins which probably will persist due to the marked engorgement before operation.

Case II—A 46-year-old white laborer was thrown out of a truck five months before admission and was rendered unconscious for a few minutes. He did not notice any of his admission complaints until two or three weeks later; he suddenly awoke one morning with buzzing in his head, congested vessels of the right eye, and exophthalmos gradually developed. The sight in the affected eye failed so that on admission he could barely make out the number of fingers on the examiner's hand. There was marked congestion of scleral and conjunctiveal vessels of upper eyelid which transmitted tactile and auscultatory bruit.

Under local anesthesia the internal carotid artery was isolated and constricted for one hour. When this was first done he became inarticulate and apparently fainted but rapidly recovered and showed no further cerebral signs for one hour, when the artery was doubly ligated with braided linen suture. By evening he had no complaints and at the end of 48 hours his vision had improved enough to be able to read the paper for the first time in weeks. He was discharged much improved with no bruit heard by him or the examiner. Four months later he reported by letter that he had some L. R. weakness but otherwise no symptoms.

Case III—A 25-year-old white girl stated that in September she had a sudden severe pain over left orbital and frontal region which was referred to the occipital region. Almost immediately afterwards she had a sensation of roaring in left frontal region not unlike the escape of steam from a boiler. This pain persisted but had become less severe. She stated that the roaring is worse with exertion and is synchronous with the heart beat. She also found that compression of the great vessels of the neck relieved the symptoms. There was no traumatic history.

On physical examination there was a left sided exophthalmos with marked superficial injection and a subconjunctival hemorrhage. There was a moderate degree of pulsating exophthalmos present and auscultatory bruit heard.

Fundus showed moderate engorgement and tortuosity of retinal veins. Vision was apparently unaffected. Wasserman was negative. X-ray of skull was negative.

Under novocaine the common carotid was exposed and the internal carotid located and compressed for 10 minutes. There was no unpleasant results so the artery was ligated with braided silk. She made a rapid uneventful recovery and was completely free from symptoms. Eight years later she reported herself still completely cured.

Case IV—A 53-year old white woman first noticed some pain in right eye about four months before admission with a hissing noise in right ear. About one month later she began to have severe pain in whole right side of face and she noticed that the vessels of the eye were becoming congested. On physical examination the right eye was injected and there was exophthalmos of about .5 cm. The motions of the eye were limited in every direction. A bruit was heard over the right temple. Wasserman was negative. X-ray of the skull and sinuses was negative. She was discharged to the Cleveland Clinic for consultation and no further record was made of the case. A tentative diagnosis of arteriovenous aneurysm of the internal carotid artery was made.

CONCLUSION

Of the three cases on record in this hospital only one had a definite traumatic history. One possibly had a congenital aneurysm and the third has no known etiology.

All three were treated successfully by ligation of internal carotid artery with marked improvement of two and cure of one.

350 E. State St.

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Nephrolithiasis

The share of responsibility in the treatment of nephrolithiasis falls equally upon the general practitioner and specialist. The family physician must exercise his judgment to the fullest in evaluating symptoms, corroborating his diagnosis with the clinical findings and simple laboratory examinations. Conservative treatment is temporary and resolves itself in most cases to the management of acute colic. The liberal use of sedatives, antispasmodics, the hot water bottle, and hot sitz baths will partially allay pain, but it should be appreciated more generally that the passage of a ureteral catheter beyond the obstruction will overcome pain instantaneously, and nausea and vomiting will cease. If infection is present, constitutional reaction will promptly subside with effective drainage. At the same time if the stone is small and impacted in the ureter, the catheter will dilate the ureter, effecting more rapid descent of the stone when it is removed. However, before it is removed pyelographic investigation should be made.

In cases of mild loin pains, gastro-intestinal upsets, and cystitis, the indiscriminate use of sedatives, dyspeptic medicines, dysurea mixtures, and lavages should not be prescribed blindly without knowledge of the true cause of the condition.

The family physician temporarily relinquishes the care of his patient for detailed study, surgical correction, and eradication of the known causal and contributory factors of renal calculi. Since this forms only a part of calculus therapy, the practitioner must again pick up the reins to guide the patient's convalescence and follow-up study. Foci of infection should be eradicated. The necessary vitamin diets with adequate ingestion of vitamins A and D should be supervised. The epithelial lining of the renal tract is maintained in a healthy state by sufficient vitamin A. In our experience we have not been able to cause the dissolution of stones by diet when they have once formed. Frequent urine examinations should be made to check the presence and amount of pus, bacteria, crystals, and blood. With a reliable indicator the P_H of the urine should be tested so that appropriate acidifying or alkalinizing drugs can be given. The newer drugs, mandelic acid and sulfanilamide, have been most valuable adjuncts in combating pyuria, but they should always be prescribed under supervision. There should be a periodic roentgen examination to detect stone recurrence followed by urography and cystoscopy if symptoms and urinary findings indicate them.—Charles A. W. Uhle, A.B., M.D., Philadelphia; Pa. Med. Jr., Vol. 41, No. 5, February, 1938.

A CASE OF OSTEOCHONDROMA OF THE BRONCHUS

By PAUL W. GEBAUER, M. D., CLEVELAND, OHIO

BRONCHIAL tumors of other than epithelial origin are rarely seen during life. However, practically every type of tissue has been encountered in the tracheobronchial tree.[1, 2] Benign growths are important because of the possibility of bronchial obstruction and its consequences; most of them are epithelial and probably represent inflammatory hyperplasia.[1]. Occasionally true benign tumors are seen in which the inflammatory element is of minor significance, usually being a light mucosal infiltration. These tumors are commonly of connective tissue origin.[1, 2, 3, 4, 5] Jackson[2] notes that chondromata and osteochondromata may show tendencies to become malignant. The following is a case report of a benign bronchial tumor which probably represents a true osteochondroma.

CASE REPORT

J. M., a 44 year old white male, entered Lowman Memorial Pavilion of Cleveland City Hospital on May 5, 1937, with the history of frequent colds for three months and rather severe hemoptysis for five days. His past history and his family history were negative except for a penile lesion in 1916.

Physical examination was negative except for occasional rales audible in the right lower chest. The patient had no fever, blood pressure 90/60, vital capacity 49 per cent, blood Wassermann 4-plus, sputum contained no tubercle bacilli, and other laboratory work was negative. Roentgenograms of the chest revealed discrete mottling in both upper lobes. There was no evidence of active disease. Bronchograms showed no bronchiectasis, but a failure of filling of the right lower lobe.

The patient received eight 1 c. c. intramuscular injections of bismuth salicylate in oil during his hospital stay. Two months after admission bronchoscopy was performed under larocaine anesthesia. The examination was negative except for the presence of a hard, corrugated appearing 8 mm. tumor mass arising from the medial wall of the right lower lobe bronchus. It almost occluded this bronchus, and why all the instilled lipiodol had entered the middle lobe was clearly evident, for the tumor mass acted as a plug to the lower lobe just below the middle lobe orifice (Fig. 1). A biopsy was performed. The tissue cut like cartilage and very little bleeding occurred.

Histologically the specimen revealed a portion of bronchial tissue showing edema and chronic inflammation; fragments of cartilage and bone were included. There was no evidence of malignancy.

One week following biopsy the tumor mass was reduced somewhat in size with biopsy forceps used through a 9 x 40 standard bronchoscope. The remainder of the mass was then grasped with heavy side-curved forceps and the pedicle severed with the lip of the scope. Bleeding was slight and controlled with sponges. Removal of the mass left a somewhat softened bronchial wall medially and revealed normal spurs of the secondary branches of the lower lobe bronchus.

The pathological report described three small fragments of tissue and a mass measuring 8 mm.



FIG. 1

Drawing of bronchoscopic appearance of tumor, almost occluding lower lobe bronchus and deflecting lipiodol into the middle lobe.

in diameter covered with grayish-white, somewhat nodular material suggesting mucosal covering. Section revealed (Fig. 2) bronchial mucosa the seat of chronic inflammation, numerous large plaques of cartilage undergoing ossification, and irregular bony trabeculae separated by mucoid connective and adipose tissue. The diagnosis was osteochondroma.

Bronchoscopy has been repeated three times since removal and no evidence of recurrence noted. The bronchial wall is still soft and more mobile than normal. The patient is symptom

Submitted January 21, 1938.

The Author

● Dr. Gebauer is a graduate of Western Reserve University School of Medicine, 1933; assistant visiting surgeon in thoracic surgery at Cleveland City Hospital; demonstrator in surgery, Western Reserve University School of Medicine.



FIG. 2

Drawing of section of tumor mass showing cartilaginous plaques, bony trabeculae with adipose connective tissue, and a covering of bronchial epithelium.

free. Repeat bronchograms show no obstruction to the descent of lipiodol into the lower lobe.

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Streptococcus Septicaemia

By H. A. BOLLINGER, M.D., and LOUIS R. EFFLER, M.D., TOLEDO, OHIO

IN over 20 years of practice, neither of the writers has ever seen a previous recovery from streptococcus septicaemia accompanied by a positive blood-culture.

Past History: The patient, Mrs. G., is aged 66 years. Health has been good till five years ago. During this period, a gallbladder infection had reduced considerably her weight and strength. Hitherto controlled by periodic gallbladder drainage with a Rehfuss tube, a severe attack of jaundice sent her to the hospital in the summer of 1937 for a cholecystostomy. Hospital stay lasted two months. Previous weight 140 lbs.; weight on discharge was 115 lbs.

Submitted February 24, 1938.

Immediate History: A sore tooth sent her to the dentist in December, 1937. This tooth was extracted without medical consultation. Physical condition still far below par.

Present History: Recovery from tooth-extraction was apparently rapid. A reflex otalgia, however, brought patient to our observation on January 10, 1938.

We were struck at once with the possibility that this otalgia was only a local manifestation of a more serious constitutional reaction.

Physical Examination: This possibility yielded to certainty after a few days observation. Patient was sent to Mercy Hospital on Jan. 14, 1938. In hospital, there were daily chills and fever. High points of temperature reached 104 with sudden drops to subnormal levels. The graphic chart showed typical "steeple type" temperature. Severe toxaemia increased daily. Drowsiness, languor, mental fogginess yielding to complete irrationality, cyanosis, etc., presaged not only a bad prognosis but early exitus. Nurses and doctors in attendance were equally pessimistic. Family was resigned to the inevitable.

Laboratory Findings: Separate throat and postnasal smears yielded a predominance of streptococci in long and short chains. A blood culture was positive on the first attempt for a non-hemolytic streptococcus.

TREATMENT

An early transfusion was given which undoubtedly supported the patient's waning strength. In addition to symptomatic treatment, intravenous glucose and saline solutions were administered.

Prontylin was given by mouth in 15 gr. doses every six hours. No apparent effect was observed. **Prontosil** was then given by deep intramuscular injection in 10 c.c. doses every eight hours. The effect was dramatic. Within three days, the whole picture of illness was changed. Not only was the patient quickly able to rationalize but the temperature became continuous and promptly descended by lysis to normal within one week. Convalescence was both uninteresting and uneventful.

Source of infection unknown. Invasion of blood-stream might conceivably have resulted from gallbladder, throat, or tooth. An autogenous vaccine, made from throat cultures, is being administered as a follow-up.

Pathologist's Note: The blood-culture on blood-agar plates yielded a non-hemolytic streptococcus. It is a well-known fact, however, that under anaerobic conidtions the same culture may show hemolytic characteristics. Whether hemolytic or non-hemolytic, the streptococcic bacteraemia in this case caused clinically such a bad septic temperature and such a terrific toxaemia that ordinary methods of treatment probably would have proved of little or no avail.

TRANSURETHRAL PROSTATECTOMY

By WALTER A. KEITZER, M. D., AKRON, OHIO

THROUGH the work of such men as Stern, Davis and Caulk, transurethral surgery of the prostate has evolved into one of the most common surgical procedures in the urological field of today. A technique for transurethral removal of the prostate gland has never been adequately described. Doctor Reed M. Nesbit, of the University of Michigan Hospital, Ann Arbor, Michigan, has devised a technique, the use of which, makes it possible to do a complete transurethral prostatectomy on the hypertrophied gland.

A total transurethral prostatectomy should be done for the following reasons:

(1) The hypertrophied lobes of the prostate within their capsules are under tension. If their capsules are incised within the prostatic urethra and then only part of the gland removed transurethrally, the remaining adenomatous tissue will not uncommonly rearrange itself and fall into the narrow urethral space. Postoperative obstruction may easily occur.

(2) The blood supply[1] of the hypertrophied prostate is such that a partial resection will interfere with the blood supply to a large bulk of the remaining prostatic tissues. The postoperative result may be a prolonged urinary infection due to the gradual disintegration of this anemic tissue. The apex of the gland and that tissue close to the capsule receives its blood supply from the capsular vessels and therefore does not slough.

SELECTION OF CASES

The transurethral method is ideal for the sclerotic gland with median bar or bladder neck contracture. It is also a blessing to the patient with carcinoma of the prostate where radical surgery is almost a thing of the past as it should be. Transurethral prostatectomy of the hypertrophied prostate by those trained in this type of surgery gives just as satisfactory results as can be obtained by any other method. In their hands, the only contraindication to transurethral approach is the inability to pass the instrument. However, it is probably true that in those hypertrophied glands weighing more than 100 grams, other methods of removal in a good risk are less tedious on both the patient and the operator.

The transurethral approach has not only been able to reduce the mortality, but it has also made possible the treatment of many patients considered too poor risks for any other method. Patients with hypertension, severe diabetes, cardiovascular disease, marked degrees of renal insufficiency may often be given relief from their obstruction. The very low mortality rate; the universal application to the poor risk as well as the good risk and also to the very aged; plus the short hospitalization makes transurethral prostatectomy the method of choice.

Submitted January 25, 1938.

The Author

● Dr. Keitzer is a graduate of University of Michigan School of Medicine, 1932; formerly in surgery, department of urology at University of Michigan Hospital.

INDICATIONS

The patient with symptoms of bladder neck obstruction, consistently carrying two to three ounces of residual urine or more, and on whom conservative treatment has failed, should have a transurethral prostatectomy. Rarely, one will see a patient with marked obstructive symptoms without a residual urine. Those cases having obstructive symptoms due to prostatitis and irregular sexual habits will usually respond to massage and urethral instillation.

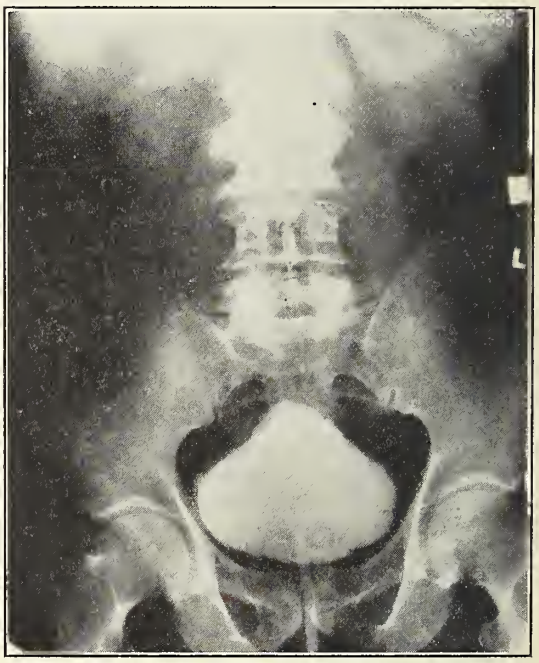


Fig. 1. Cystogram with sodium iodide solution in the bladder. The prostate may be seen pushing upward into the floor of the bladder.

DIAGNOSIS

The rectal examination, although practical and important, is not always an accurate method of

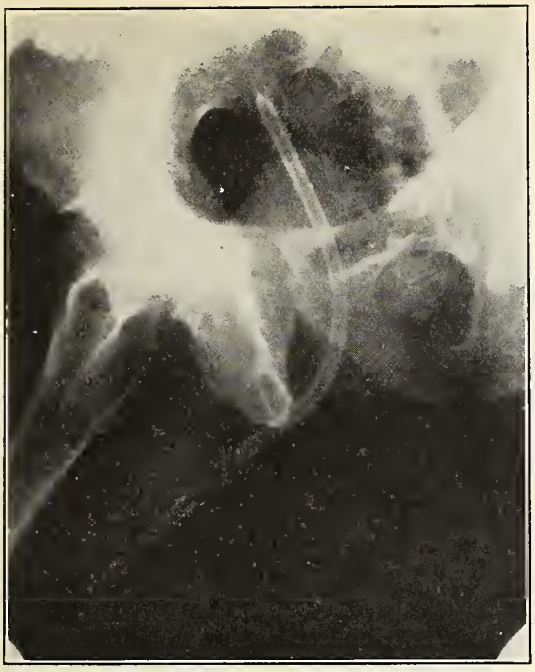


Fig. 2. Oblique air cystogram with catheter into bladder. The prostate may be seen surrounding the catheter.



Fig. 3. An oblique urethrogram using an opaque jelly and contrasted with air in the bladder. The length and spread of the prostatic urethra can be seen.

determining the size and type of gland, since only the lateral lobes of the prostate may be palpated. Cystoscopic examination will be necessary to rule out median lobe and median bar obstruction of the bladder neck. Stones and tumors of the bladder may be noted and the necessary biopsies made at this time. Further information may be obtained and with less trauma by means of urethrocystograms. A more accurate determination of the size of the gland and the type, i. e., if the gland is an hypertrophy or a carcinoma, may be made by means of the X-ray.[2] A cystogram is first made in the anterior-posterior position using a large film to include the entire K.U.B. tract (Fig. 1). Stones of the upper urinary tract and reflux up the ureters may be noted in this film. Trabeculation of the bladder can be seen. Filling defects in the bladder speak for possible carcinoma. A filling defect at the bladder neck is the prostate pushing upward into the bladder. The second film (Fig. 2) is a 30 degree oblique air-cystogram using a soft rubber catheter in the urethra and bladder. The prostate will be seen surrounding the catheter and protruding into the bladder. The third film, (Fig. 3), is a 30 degree oblique urethrogram using an opaque jelly in the urethra and contrasting with air in the bladder. The length and amount of the anterior-posterior spread in the prostatic urethra will determine the size of the lateral lobes. Carcinoma of the prostate is determined by a narrow irregular urethra (Fig. 4). From a series of urethrocystograms a fairly accurate determination of the type, the size and location of the obstruction tissue can be made. Other co-existing pathology will often be found.

PREPARATION OF THE PATIENT

The essentials of preparing the patient for transurethral prostatectomy will vary some from our basic principles of the preoperative handling of the prostatic patient. Preliminary urinary drainage is important to the patient with considerable infection or impaired renal function. The urethral catheter can be used in these cases for a short period of time, the average for severe cases being six days.[4] The severe cases requiring prolonged drainage should be placed on suprapubic cystotomy as soon as their condition warrants it.

Patients carrying more than 10 ounces of residual urine or in acute retention without much infection or renal damage are placed on urethral catheter drainage for a few days prior to operation.

Preliminary drainage for the other types of cases is of doubtful value and may do harm by the production of a severe urethritis. Preliminary vasectomy has not been found necessary during the past two years. Epididymitis has been almost negligible.

ANESTHETIC

Spinal anesthesia, using a small gauge needle and 100 milligrams of novocaine crystals gives the best results.[2] The spinal puncture is made with the patient in the sitting position. The re-

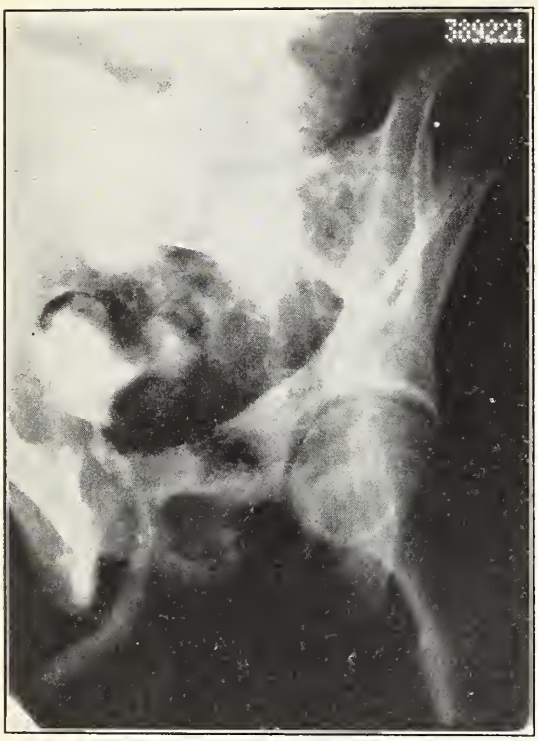


Fig. 4. Urethrogram of carcinoma of the prostate. Carcimona is determined by a narrow, irregular prostatic urethra.

sult is a saddle anesthesia with the level at or just above the pubis; the duration is about 90 minutes; and the blood pressure variations are seldom marked. Near the completion of the operation, 0.5 c.c. of adrenalin may be given in cases where the blood pressure has dropped. This may reveal potential bleeders before the patient returns to his room.

TECHNIQUE OF PROSTATECTOMY

To describe the technique of transurethral prostatectomy is not necessary in this discussion, but to convey the importance of a systematic approach transurethrally is essential.

The hypertrophied prostate may be roughly divided into two types for the purpose of resecting. The first type (Fig. 5) is usually a generalized enlargement consisting of a median and two lateral lobes, which herniate through the internal sphincter and protrude into the bladder. The second type (Fig. 7) consists of lateral lobe hypertrophy or a collar enlargement which lifts the bladder floor upward and therefore remains between the internal and external sphincter. This latter type is very prone to post-operative obstruction unless entirely removed.

During the actual resecting the prostate is attacked in a systematic manner. Three zones are considered and resected respectively (Fig. 5), A and B. The intravesical portion is removed first to the internal sphincter. The portion between the sphincters is then removed in a similar manner down to the capsule. The apex is the final tissue to be removed. The entire technique of the operation is based on the knowledge of a blood supply and the fact that hypertrophied tissue is under tension. The final step before completing the operation is to insert the finger in the rectum and make certain there is no more obstructing tissue under direct vision and palpation. The verumontanum is preserved for obvious reasons, and therefore impotence is not to be expected. A complete transurethral prostatectomy is the result (Fig. 6). A similar technique is used to remove the large lateral lobe hypertrophies (Fig. 7), with the result that a complete prostatectomy has been obtained (Fig. 8).

DURATION OF OPERATION

The Stern-McCarthy resectoscope has been found to be the most practical instrument for transurethral surgery. The prostatic tissue can be removed more rapidly and with less bleeding with the loop electrode. The average amount of tissue removed transurethrally or by the suprapubic route is 28 to 30 grams. Approximately 40 to 50 grams of prostatic tissue can be removed in one hour's time, therefore, the majority of transurethral prostatectomies will require less than an hour to complete them. Large glands requiring longer than 60 to 70 minutes of resecting to complete them, should have a two stage operation. The second stage may be done five days later.

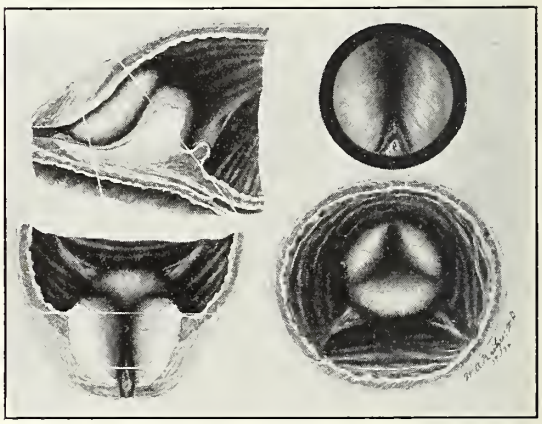


Fig. 5. A three lobe generalized hypertrophy of the prostate drawn as a sagittal section, a panendoscopic view, a coronal section and a section with the dome of the bladder removed. The lines A and B divide the prostate into three zones.

POSTOPERATIVE CARE

A Foley hemostatic catheter is placed in the urethra and bladder and the bag distended with water. Light traction is applied to the catheter. The postoperative bleeding is as a rule only slight in amount as has been determined by measure-

ment. A completely closed sterile irrigating system is used for the first two to three days postoperative. Irrigations with sterile boric solution or water is done at frequent intervals at first and then gradually lengthened to every two hours. The use of this system has eliminated most of the fever reactions found to follow hand irrigations.

Fluids are forced to 4000 c.c. or more daily depending upon the patient's water balance.[3] The patient should normally excrete 1500 c.c. or more of urine daily to have a proper water balance. The intake as well as the output of fluids from all sources must be checked daily.

The patient is allowed out of bed for five minutes on his first postoperative day, so that by the time the catheter is removed on the third

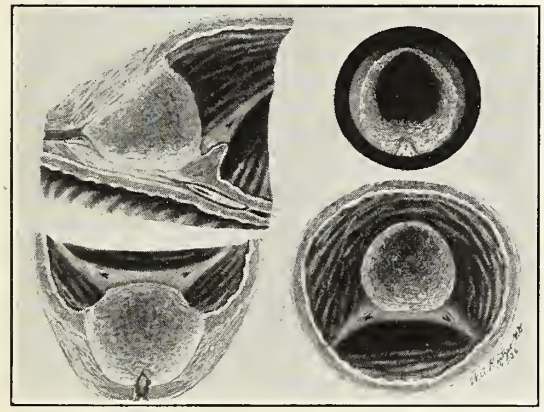


Fig. 6. A complete prostatectomy has been done with preservation of the verumontanum.

day, the patient is able to be up and about at will. The catheter is not removed until the return flow is clear. The patient should be able to void easily with a good stream and no difficulty in starting the urine flow. Frequency and moderate burning is to be expected during the first week after removal of the catheter. Failure to void freely means that the obstruction has not been entirely removed. This patient should be reoperated within a very short time, because the tissue remaining in the prostatic urethra will slough due to the loss of its blood supply. Sepsis may result from the combination of partial obstruction with sloughing of anemic tissues.

COMPLICATIONS

The two most important postoperative complications are hemorrhage and infection. Hemorrhage is prevented by close attention to the return flow from the catheter. The cause of most hemorrhage is plugging of the catheter with a blood clot during the first 24 hours. A vicious cycle results with distention of the bladder and the prostatic fossa, causing the prostatic vessels to open and fill the bladder with blood clots.

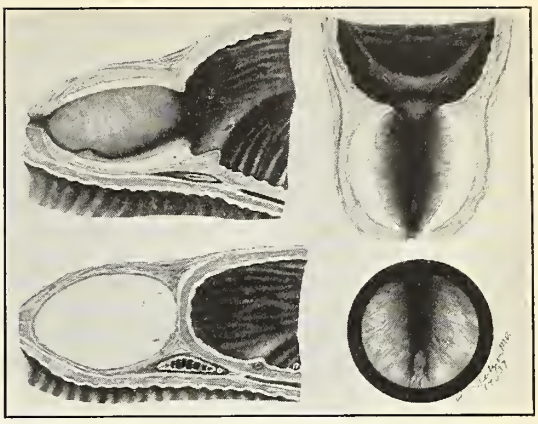


Fig. 7. Large bilateral lobe hypertrophy with majority of the tissue between the sphincters. The views are sagittal section through the prostate and bladder, a coronal section and a sagittal section through the right lateral lobe showing the blood supply to the hypertrophied lobe. Note the verumontanum is not the posterior limit of the prostate.

Any hopes for emptying a bladder filled with clots through a soft rubber catheter are futile. Transurethral evacuation is usually necessary. When the bladder has been emptied of clots it is seldom that any active bleeders will be found.

Delayed bleeding on the 14th to 21st day may occur but is seldom of any significance. If the bleeding is marked, this may be stopped by bed rest and an indwelling catheter for 24 hours.

Postoperative sepsis is dependent upon the degree of infection already present in the prostate and kidneys postoperatively, plus the incompleteness with which the prostatectomy has been performed. To leave large amounts of adenomatous tissue in the urethra with little or no blood supply, not only keeps up the already present infec-

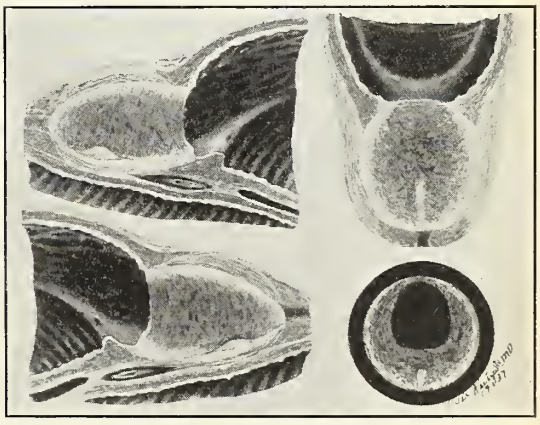


Fig. 8. Complete prostatectomy of the gland shown in Fig. 7, exposing the internal sphincter and capsule. Note the verumontanum has been preserved.

tion, but predisposes to spreading of the infection, especially if the patient has difficulty in emptying his bladder. The onset occurs usually 12 to 24 hours after removal of the catheter. At

the first indication of beginning sepsis the catheter should be replaced.

RESULTS

The mortality has been reduced remarkably from 18 per cent in the last 400 cases of suprapubic enucleation reviewed at the University Hospital[4] to somewhat less than 2 per cent by the transurethral method. Infection will account for a little less than half of the cases dying, while cardiac and renal insufficiency will account for the majority of the others.

Recurrence of obstruction has not been seen in any non-malignant case given transurethral prostatectomy. In the first 400 cases, resection was again necessary in 14 cases of malignancy.[4]

Urinary incontinence has occurred in five cases in well over 2000 transurethral operations on the prostate. Three of these were carcinomatous glands which had invaded the membranous urethra.

Although there are no statistics available, the return of sexual functions has been noted in a number of cases. The complete removal of the large infected prostate with the preservation of the verumontanum probably accounts for this return of function.

CONCLUSIONS

1. The complete removal of all hypertrophied tissue is essential to obtain the best postoperative functional results in bladder neck obstruction.

2. Transurethral prostatectomy provides a means of removing the entire prostate in bladder neck obstruction applicable to a large group of patients and with a much lower mortality than is attainable by any other method.

3. The end results of transurethral prostatectomy are just as satisfactory as that obtainable by any other method of prostatectomy.

1021 SECOND NATIONAL BUILDING.

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Never tell a patient or suggest that his symptoms are imaginative or that nothing is wrong, "go home and forget about it". How can the patient forget pain that is so real to him without a definite program to follow? One must be a good listener and encourage the patient to talk out everything.—L. Gilbert Little, M.D., Wichita, Kansas; Jr. of the Kansas Med. Soc., Vol. XXXIX, No. 2; February, 1938.

Anesthesia

There is another use for such drugs as novocaine, nupercaine, and pantocaine where it is not deemed advisable to use a spinal anesthetic. This is the so-called local anesthesia and is used in several different manners. The use of these drugs as local anesthetics differs with the technique with which they are used. For some surgical procedures by simply infiltrating a one per cent or one-half per cent solution of novocaine in the tissues to be operated upon given fairly good anesthesia. Much better anesthesia will result by the field block. Here the nerve supply is anesthetized with the drug used well outside of the field of surgery. When efficiently carried out, this method is very satisfactory. Another method is known as regional anesthesia. Here the large nerve trunks are infiltrated generally close to their exit from the neural canal or before they break up into their final branches. Examples of this are, the cervical plexus block, the caudal and transsacral block, or the blocking of various other nerves or plexuses of nerves close into their trunk formation. This type of anesthesia is very successful. At times, it can be used on patients that are too ill to consider any other type of anesthesia. To be successfully carried out the anesthetist must be skilled in its use for practical application. I believe that this type anesthesia should be used a great deal more than it is.

The use of rectal anesthesia can be recommended only for basal anesthesia. Doses sufficiently large to produce surgical relaxation are too depressing to the patient for safety. To give only basal anesthesia in small doses, is ideal in certain types of patients, especially the markedly apprehensive seen so frequently in thyrotoxicosis.

I would like to stress that the postoperative care of all surgical patients is very important. The patient should be well oxygenated during the close of the anesthetic. He should be made warm and carefully watched until he has reacted from the anesthetic. With the least sign of cyanosis or shock, oxygen should be administered and other treatment instituted. It is essential to see that the patient has an open airway and that all mucus and vomitus is cleared out of the mouth and pharynx. Explicit instructions should be given to the nurse that the patient be turned, and be made to cough, and clear out the lungs at frequent intervals for the first two or three days after the operation. We have had only six serious postoperative pulmonary complications in the last 3,800 anesthetics given.—Boyd F. Brown, M.D., Huntington, W. Va.; W. Va. Med. Jr., Vol. XXXIV, No. 2; February, 1938.

Share Your Thoughts: Cultivate companionship in thought and in feeling. Confide, confess, consult.—Fetterman.

PREVENTION OF INFECTION AND RELAPSE IN FUNGUS DISEASE OF THE FEET

By LEON GOLDMAN, M.D., CINCINNATI, OHIO

AT the University of Zurich, more than 100 years ago, Lukas Shönlein made a brief announcement little considered at that time but extremely important to the history of modern medicine. He stated that favus was produced by a "plant being". In the words of Bloch[1], "for the first time the conception of an exogenous parasitic cause for a disease of man was raised to clear reality from the domain of mystic speculation". This great discovery, ignored almost entirely at the time, was followed shortly by the important studies of David Gruby. For many years afterwards, the study of mycology languished until the recent great works of Sabourand, Jadassohn, Bloch, and Miescher. These recent studies were sorely needed because fungus diseases had become real important problems. Fungus disease of the feet, however, was little considered in the earlier studies of these parasites. M'Call Anderson[2] in his book "On the Parasitic Affection of the Skin" (1868) does not even mention tinea of the feet beyond a brief note on tinea trichophytina unguium.

In most dermatologic practices, mycotic infeetions are the most prevalent cutaneous disorder during the late Spring and Summer months. In the Student Health Service, at Stanford University, Aldeson and Reich[3] found "in men of post-adolescent age, tinea was by far the most prevalent cutaneous infection observed". Increasing incidence of ringworm of the feet had been noted before by Legge, Bonar and Templeton[4] and by Chenoweth and Werner[5]. Apparently the incidence of these diseases is still increasing rapidly. In large urban centers it is uncommon to find an adult without clinical evidence of fungus infection of the feet. Many factors have been blamed for these alarming increases such as the infection of large groups of soldiers during the past war, greater use of all sorts of public bathing facilities, the spread by the common shower room in large gymnasia, etc. In rural communities, the infected groups comprise usually the athletic teams of the schools and boys from various types of camps. This affliction, in the United States, is of much greater incidence, proportionately, than in European countries. Although it was in England that Whitfield (1908) "first showed that some vesicular and scaly eruptions, between and under the toes, and, more rarely, between the fingers and on the palms, were due to ringworm", in that country these infections, "do not bulk largely in dermatologic practice[6]".

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Ringworm of the feet has become something vastly more than a mere simple, localized, uncomfortable skin disorder of the feet. Secondary pyogenic infections of varying degrees of severity are not uncommon. However, it is chiefly through hypersensitization reactions to these fungi that grave disorders arise.[7] There may be produced skin hypersensitivity reactions varying from the commoner localized "ide" manifestations of the hands to generalized dermatidides including a generalized exfoliating dermatitis. These more severe cutaneous reactions now seem to be more frequent. In the past four months seven cases of the so-called "erysipeloid epidermophytide" in the legs have been observed among private and clinic patients. Not only skin eruptions but vasomotor dhinitis[8] and even asthma[8] have been reported as hypersensitivity reactions to fungi. Tinea infections play numerous roles in the already confusing field of industrial dermatoses[9]. Fungi may infect, secondarily, areas of contact dermatitis or an industrial dermatosis may become added to a mycotic infection of the skin. In a study of torch oil dermatitis, recently, Kammer[10] stated that "no cases of torch oil dermatitis were encountered among workers who were clinically free of interdigital foci of epidermomycosis although patch tests showed them to be sensitive to torch oil". As an illustration of the further significance of trichophyton skin infection Hval[11] has recently reported severe reticulosis of regional lymph glands following a long treated trichophyton skin infection. Trichophyton infection of the glands could not be demonstrated. The reticulosis was so marked that "the whole process may be regarded as having been about to change over to that of a rethotetsarcoma". The patient died. Pelvin and Tschernogoubrow[12] described a similar picture but

*From the Department of Dermatology and Syphilology of the College of Medicine of the University of Cincinnati.

Submitted December 14, 1937.

reported trichophyton fungus in the lymph glands.

It is obvious that an intelligent approach to the study of a prophylactic regime for ringworm of the feet should include a discussion of the biology of the organisms producing such common and increasingly severe reactions. According to Henrici[13] most of the cases of interdigital ringworm of the feet are caused by various species of the genus trichophyton, about 75 per cent by the Kaufmann-Wolff type. Several species of the epidermophyton genus and occasionally monilia (yeasts) may be found also. The pleomorphism of these fungi on the different media, and occasionally even on the same media, make their study and identification difficult. Now these fungi have all been found on apparently normal, clear, interdigital spaces[14, 15]. However, such an authority as Bruns[16] "considers it certain that ringworm fungi do not vegetate 'saprophytically' (by which he probably means harmlessly) on the healthy human skin". These fungi can grow on such things as straw, hay, feathers, and leather (Weidman[17]). Recently, Muende and Webb[35] found relatively large colonies of trichophyton fungus growing saprophytically on pieces of dung. These were found during a study of a group of calves heavily infected with trichophyton fungus. Pathogenic fungi have been found in culture from shoes by Jamieson and McCrea[18] but not by Husick[19]. There are also conflicting reports on the results of culture on other materials. Hruszeck[20] obtained positive cultures (with Achorion gypseum) on cotton cloth, linen (pure), and linen "half". On oak wood, ebony, the cultures were negative; on pear wood the fungi grew weakly. On beech, fir, "sapeli", "gabon", "zebrano", they were positive. No reasons were given for these peculiar differences in culture. On Douglas fir and pine, Bonar and Dreyer[21] obtained no fungi in six months. These authors believe that algae slime on floors favors growth of fungi. When there is sufficient moisture present, Bonar and Dreyer[21] believe that fungi can grow on wool and silk. They had no definite data on the growth on cotton or linen. Kadisch[22], however, has shown that trichophyton can survive on silk and linen. Trichophyton and epidermophyton have been cultured by J. W. Williams[23] from "floor scrapings, mats and gymnastic apparatus at a school[24]". Spores of fungi have been carried nearly 14 miles up into the stratosphere and have survived cold, solar radiations and other extreme conditions.

In regard to those factors in the patient which make for the infection and for the persistence of infection, in the interdigital spaces, little is actually known. The increased alkalinity of the interdigital sweat is supposed to favor fungus growth. W. Jadassohn[25] and Sulzberger[26] believe that these pathogenic fungi grow on dead tissue, such as the horny layer of the skin. When conditions arise which cause relatively more dead skin, i.e. macreation, there will be a rapid growth of the fungi. To study the invasiveness of pathogenic fungi Williams[27] used artificial media containing hydrolized hair and hydrolized skin. The growths were subsurface especially on the hair media. When cysteine hydrochloride was substituted for hair, the growths were predominantly subsurface. More experiments of these types are greatly needed to understand the background of fungus infection of human skin.

After many trials and much persistence on the part of the patient and the doctor, the fungus infection finally appears to be cleared up. Clinically, now, the interdigital spaces and the soles are free of any lesions and moreover, the patient has no subjective symptoms. Without the examination of skin scrapings and without cultures it is difficult often to differentiate between scaling from hyperkeratotic (calloused) areas over pressure points on the plantar surface of the foot and scaling from chronic thickened fungus infected areas. This stage of clear skin (positive cultures may still be obtained) is as noted above, difficult to each. Wise and Wolf[28] state that "there appears to be a widespread general impression that ringworm of the feet is so recalcitrant to treatment as to be considered incurable". The first step in the very cumbersome and detailed scheme of prophylaxis is the search on the patient for mycotic foci which may cause reinfection of the interdigital spaces. As many authors have pointed out, the nails are the chief offenders. These nails should be inspected carefully. If one can not decide, in the absence of scrapings and culture, whether the nail deformity is traumatic or mycotic, with a history of repeated relapses, it is better to consider the nails as fungus infected. The vigorous therapy for onychomycosis must then be employed. Other less common sources are tinea of crural, perianal area and axillary areas, and occasionlly also, tinea of the hands.

When one has recovered from interdigital fungus infection the local applications must be continued for some time afterwards. The preparation used should be one which has been proved to be effective on the patient and the continued use of which does not cause skin irritation. Though the number of preparations used is legion, widespread commercial advertising has made cirtical analysis difficult. There is no one "good" prescription for the treatment of fungus infection of the feet in all cases. It is the technic of application which is really much more important. A preparation, used correctly, which does not seem effective in a short time, or which is irritative, should be discontinued immediately and another substituted. These chemotherapeutic agents will usually fall in one of the following important groups:

1. benzol derivatives, chiefly salicylic acid and benzoic acid preparations in varied vehicles. This group includes also the newest compound, ethyl-parabenzonate[29].

2. iodine mixtures in varied vehicles, including Chamberlin's iodine mixture[30]:

sodium iodide	3.31
potassium iodide	0.14
calcium iodide (hexahydrate)	0.13
iodine	3.0
water qs.	100.0

3. effective anilin dye mixtures, chiefly carbol-fuchsin paint and brilliant green.

4. mercury, chiefly the bichloride and the new phenyl-mercuric salts.

5. tars.

6. thymol preparations.

7. permanganate baths—usually in addition to one of the above mixtures.

It must be emphasized that all these agents are strong and dermatitis venenata must be avoided. The persistent staining, especially of the nails, by the anilin dye mixtures, is very disturbing except when one wishes to be sure that the patient will not go to a public shower or swimming pool. The obviousness of the dye color will make up for any lack of public health interests. During the spring and summer these medicines should be used at least twice weekly. When one goes frequently to heavily infected places, fungicidal preparations should be applied there each time. Applications may be followed by powdering, either simple talc or medicated mixtures. Care should be taken also that these latter mixtures do not cause irritation. Sometimes the powder alone, if applied frequently enough, is effective without the use of any other materials. During the winter months and in the absence of visits to the athletic club, one application every two or three weeks may be sufficient. X-rays have no place in the prophylactic regime unless there is marked hyperidrosis with relapses exceedingly difficult to control.

Biological methods such as trichophytin, trichophytin-oidiomycin mixtures, or the so-called "claso-vaccines" are not recommended because of the present doubt as to their true value. They may be tried, however, when the simpler methods, with the varied chemotherapeutic materials, fail to prevent relapses. It is important to remember with the use of different trichophytin mixtures, the skin will continue to remain positive in spite of large numbers of "desensitizing" injections. It is not possible at the present time to produce that ideal state by trichophytin injections, namely an immunity to fungus disease.

Through the few definite facts known of the biology of the fungi, the question of the treatment of the shoes and clothing is important. Since positive cultures have been obtained from shoes, attempted sterilization of these should be instituted. This is done usually through formaldehyde either box fumigation—more involved—or sponging. This procedure should be repeated rather frequently during the warm months. Care must be taken to avoid a formaldehyde dermatitis from contact with inadequately dried shoes. Small amounts of formaldehyde also may be applied on shoe trees. It is hoped that soon, satisfactory materials, other than the offensive formaldehyde, may be developed. It is important to remember that these preparations should not be toxic when absorbed by the skin. Apparently, dusting powders in the shoes are less effective than the formaldehyde. During the warm months the perforated or the sandal type of shoe should be preferred.

Socks and stockings are the next important items for sterilization. Unless one is certain that cultures from clear interdigital skin and adjacent nails are negative, sterilization of these articles of clothing must be included in the prophylaxis routine. Bonar and Dreyer[21] claim that dry cleaning solvents have only slight disinfectant action. Ten minutes, however, at 75° C. completely kills fungus embedded in skin scales or cultures grown on fabrics. Socks should be changed frequently, and boiled. In spite of the belief of many patients the color of the socks is immaterial either as favoring or inhibiting fungus growth. This belief arises perhaps from the occasional case of contact dermatitis either from the finish or the dye of the socks. The perforated type socks may help also. Since not all the clothing in the laundry bag is to be subjected to high temperatures, the socks may be kept separate. The contaminated silk stocking is much more of a problem. Few women will deign to wear boilable cotton stockings even during the course of a severe oozing fungus infection. The technique of the Department of Dermatology at the Finsen Institute seems effective. The foot part of the stocking is laid out flat on supports in a tin box. Grain alcohol (90%) is poured out liberally over the stocking, the lid closed. The stocking is kept there for 24 hours.

For a person with frequent relapses, papers should be used on the bathroom floors instead of bath mats. In the home the tub may be cleansed out and allowed to dry well before being used again. The shower floor should have an elevated removable wooden trellis-like floor. However, the greater danger of infection is not in the home but in the public centers.

In large urban communities especially, the public health aspects of the prophylaxis problem are much more important and much less certain of result. Logically, of course, infected people should keep away from those centers where fungus infection can be spread. Since the incidence of fungus disease is so great in large cities, very few people, then, would be permitted at public resorts. Since the majority of people with tinea of the feet experience little discomfort from their

disease (asymptomatic tinea), few will stay away voluntarily. However, where personal regulation is more stringent (camps, schools, country clubs and factories) there the public health measures may be successful.

The shower room, of course, is the chief site of contamination. Skin scales with fungi may be found in wet pools of water and cracks. These shower rooms should be well ventilated. The person coming to this room should wear some type of bath shoe, preferably one which keeps the foot some distance from the floor and one which can be cleansed and dried easily. When it is impossible to wear shoes, on the way to swimming pools, the relatively unsatisfactory chemical prophylactic bath may be used. These solutions must be changed frequently. The brief period of contact with the foot is too short a time to be fungicidal effectively. Frequently, people become too careless when chemical foot baths are the only prophylactic measures employed. Unless these solutions are placed conveniently, they may not be used at all. The solutions used most often are:

1. zinc chloride 5 per cent
2. sodium thiosulphate 10 to 15 per cent[36]
3. copper sulphate 1 per cent
4. Blank's solution—3 per cent acetic acid and ¼ to ½ sulphuric acid[31].

Claassen[32] reports positive cultures in media containing 10 per cent sodium thiosulphate.

Better protection is secured by using on the floor an elevated wooden trellis work leading directly from the locker into the shower cubicle. This framework should be removed often, cleansed, and dried. Work is being done now on the possibility of using an "anti mycotic paint", a paint surface which will prevent fungus growth and will, on hydrolysis, be fungicidal against the fungi in skin scales. If such a composition can be developed, without being toxic to the skin or the other body tissues, it would still seem to have the same objections as the chemical foot baths. Moreover, it is possible that certain resins in the paint films may help the growth of fungi on the wood. On return to the locker room, individual prophylaxis should be applied immediately after the feet have been dried thoroughly. It is difficult to do anything significant for the contamination from infected areas about the swimming pools. Prophylaxis must wait until return to the shower room. Careful, continued supervision and intelligent cooperation of all concerned are absolutely essential. It should be mentioned in passing, that animal sources are of relatively little concern in the spread of fungus disease of the feet.

Our effective prophylactic routine at the present, then, is extremely detailed and unwieldly. Perhaps much of it is even not necessary. We can not tell since we know so little of primary factors concerned in the pathogenesis of fungi in the skin. More work is needed there rather than in just adding by simple clinical obseravtions more steps to the routine. Studies in the protective powers of trichophytin injections, experiments in comparative pathology[33] and in human pathology,[34] attempts to evaluate factors responsible for pleomorphism in culture, all these will help to develop a more rational, and most likely, a more simple and more efficient scheme of prophylaxis.

CONCLUSIONS

A successful and simple method of prophylaxis against the common and increasingly serious fungus disease of the feet will be possible only when the basic factors of fungus invasion and infection of the skin will be understood. Our present scheme of prophylaxis is detailed, awkward, and at times, impractical. Yet, attention to all the phases must be observed otherwise the prophylaxis fails. Individual prophylaxis must be concerned with the following:

1. The continuance of good local therapy for long periods after the infection is cleared clinically.
2. Attention to adjacent potential foci of infection, chiefly the nails.
3. Care to shoes and socks and stockings.
4. Care to the bathroom.
5. Avoidance of contaminated centers or, at least, extreme vigilance there.

Public health prophylaxis by the physicians concerned, should be interested chiefly with:

1. Supervision and observation of all public centers.
2. Insistence that all people, especially those with asymptomatic tinea, be treated.
3. The detailed set up in shower rooms.
4. Close attention to rural communities where the incidence of infection is still less and where prophylactic measures would be more successful.

617 PROVIDENT BANK BUILDING.

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Intradermal skin tests with killed coccidioides organisms were carried out on 449 hospitalized patients. All twelve patients with proved coccidioidal granuloma reacted positively. Positive reactions were obtained in other conditions, particularly tuberculosis. A higher incidence of positive reactors was found in noninfected residents of the San Joaquin Valley, an endemic area, than elsewhere in the State.—Samuel Hurwitz, M.D., John Edward Young, M.D., and Bernice U. Eddie, M.A., San Francisco; Cal. and West. Med., Vol. 48, No. 2; February, 1938.

Bacterial Variations in Human Infections

First of all, it is important to provide culture media that will approximate environmental conditions within the host from whom the bacteria are taken. Second, sufficient time must be allowed for the bacteria to demonstrate their cultural and biological characteristics. Third, associated and contributing factors in inflammatory lesions, such as chronic trauma, systemic disturbances, and symbiosis of organisms in a flora, must be taken into consideration when evaluating the significance of bacterial growth. For instance, the presence of Vincent's organisms about the teeth may not be as important a clinical fact as faulty occlusion. These organisms may also be found in mouth lesions associated with blood dyscrasias. In one instance the writer observed an acute Vincent's ulceration of a lymphosarcoma of the tonsil.

From a therapeutic standpoint, and especially in vaccine and specific serum therapy, one should not proceed with the administration of these remedies without a knowledge of the bacteria present. Exception might be made in cases of suspected diphtheria, but here also clinical judgment is often faulty. Recently, a child appeared with a membranous exudate in the pharynx that resembled one produced by the corynebacterium diphtheriae. It had the characteristic color, was tenacious and left a bleeding surface when removed, but the bacteria causing it was the staphylococcus aureus.

There is probably no more greatly abused therapeutic procedure than vaccine therapy. Often the selection and use of vaccines is based entirely upon the clinical nature of disease and a wild conjecture as to what bacterium, if any, is the cause of the disorder.

Vaccines should be prepared to meet specific needs, care being taken to preserve the antigenic property of the organisms. Cultures of organisms with predominating rough colonies agglutinated by normal saline do not possess the antigenic properties of those with predominating smooth colonies.

Vaccines are used empirically too frequently. If clinical improvement follows their administration they are given credit, rightly or not, and if no improvement results vaccine therapy is condemned.—Roy S. Leadingham, M.D., Atlanta; The Jr. Med. Assn. of Georgia, Vol. XXVII, No 2, February, 1938.

I used to wonder why people should be so fond of the company of their physician, till I recollected that he is the only person with whom one dares to talk continually of oneself, without interruption, contradiction or censure.—Hannah More.

SHOCK THERAPY OF SCHIZOPHRENIA

By BEATRICE POSTLE, M.D., Columbus, Ohio

IN 1933, Manfred Sakel[1], of Vienna, Austria, introduced for the treatment of schizophrenia, the induction of repeated hypoglycemic states by the use of insulin. In 1935, L. de Meduna[2], of Budapest, Hungary, introduced for the treatment of this disease a method which consists in the induction of epileptiform attacks by the administration of drugs irritative to the cerebral cortex. De Meduna found that the two drugs most successful in producing epileptiform seizures are metrazol and camphor.

Sakel claimed to obtain over 80 per cent of good remissions in recent cases, and 40 per cent in chronic cases. Meduna also claimed to have over 80 per cent of good remissions in recent cases, as the result of his mode of therapy. However, he does not stress the possibility of curing chronic patients.

In the past year and one-half, there have been numerous articles in the literature concerning these modes of therapy. Most of them have been favorable. The majority of mental hospitals throughout the country apparently have adopted these methods of treatment. There has been much publicity in newspapers and periodicals concerning these forms of treatments and many false hopes have been raised.

De Meduna based his theory of the convulsive therapy upon the following observations: That schizophrenia and epilepsy rarely occur together; that in cases of epilepsy in which schizophrenia developed, the epileptic convulsions became conspicuously rare and later ceased; that in a few cases of catatonia recovery has ensued after spontaneous epileptic convulsions. He therefore assumes that there exists a biological antagonism between the two diseases.

Let us consider the validity of the observations which were the starting point for his theory of therapy which consists in inducing convulsive seizures.

Nolan Lewis[3], in a recent (1936) monograph, in which he gives a comprehensive bibliography and survey of the literature of schizophrenia, makes the following statements:

"The clinical combination of epilepsy and dementia praecox appears quite frequent in large mental hospitals. One who is fundamentally epileptic may develop the psychosis of a praecox or of a schizophrenic nature on the one hand, and on the other hand some types of catatonic praecoxes occasionally have a convulsion which resembles the epileptic fit in many respects." . . .

"It is the opinion of some of the European psychiatrists, notably of Urstein, that we have many people in institutions classified as epileptics who are really cases of dementia praecox with convulsive tendencies. It is fairly certain that those cases of epilepsy having active hallucinations and delusions which are constantly expressed through their daily lives are closely allied in some way to the dementia praecox group."

Submitted February 28, 1938.

The Author

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Likewise, Jelliffe and White[4], state in their text book:

"Epilepsy may seem in many cases to produce a general mental deterioration which may become very profound. These cases, at least many of them, on prolonged observation prove to be cases of dementia praecox with convulsive manifestations."

Regarding the alleged recovery of certain cases of catatonic dementia praecox who had spontaneous epileptic convulsions, one Edw. J. Seymour[5], an eminent psychiatrist of a century ago, wrote in his text book that he agreed with Esquirol, who said, "*L'epilepsie compliquée d'alienation mentale ne guerit jamais.*" 'With the occurrence of epilepsy, the mind is often restored to health, giving to the relatives hopes of recovery. Alas, these hopes are of but transient duration—the clearing up of the intellect is but a harbinger of speedy dissolution."

G. Burrows*, member of the Royal College of Physicians in London, described in a paper published in 1828, a mental case to whom camphor in large doses was given. A convulsion occurred and recovery ensued. Relapse occurred, however, two years later.

Compared with modern physicians of today, our predecessors were perhaps comparatively lacking in knowledge concerning chemistry, anatomy, physiology, and other branches of medicine, but they were not deficient in observation. It is interesting to note that certain investigators today, notably Petersen[6], are reviving the Hippocratic thesis of the importance of atmospheric

(* In the following several paragraphs, most of the references relative to the historical aspects of the treatment of mental disease were found in a book edited by John M. Galt, entitled, "The Treatment of Insanity", published by Harper & Bro., N. Y., 1846. It contains a collection of papers published from 1689 to the time of the publication of the book.)

conditions in relation to the development and manifestations of various diseases.

It has long been noted that shocks of various types are capable of bringing about an amelioration of symptoms, usually temporary, in certain psychotic individuals. Severe illnesses, notably, produce this effect.

Methods of producing shock have been employed by physicians for centuries in the hopes of curing mental disease. Many of our predecessors, however, realized the futility of such therapy and even the ultimate harmful effects. Some of the ancients (back to the time of the early Greek physicians) brought about shock by venesection. This treatment was in vogue thereafter until about a century ago.

Helfrici (1689) advocated the use of the cautery (presumably a hot iron) applied to various parts of the body. This method had been used by men before him and continued to be used by those after him, including Esquirol, one of the founders of the modern humane treatment of the mentally ill. One advocate of this procedure incised the scalp to the bone, applied repeated cautery, and claimed to cure patients thus treated. There were other methods of producing varying degrees of shock and exhaustion which were in vogue for centuries. Erasmus Darwin proposed rotation as a means of treatment. He was preceded by Caelius Aurelianus in the conception of this idea. Cox (latter part of the 18th century) put it into practice. By this method, patients were put in rotary machines suspended from a ceiling. Machines were constructed for both horizontal and perpendicular motion. Some of these were worked by a windlass and were capable of being revolved a hundred times in a minute. Nausea and vomiting, fever, and in some cases, collapse and death ensued. Many writers, including Benjamin Rush, an eminent Philadelphia physician and the first American psychiatrist, extolled the virtues of this treatment.

Another form of therapy much in use previous to the past century, was that of immersion in ice cold water. Sometimes it was recommended that the patient's head should be held under water until he was "near death". Doctor Francis Willis, psychiatrist to King George, III, of England, devised an apparatus in which the patient could be plunged into a reservoir of cold water at will.

The use of drastic cathartics and emetics over long periods of time were universally accepted treatments. Advocated by many reputable physicans were the applications of moxa (substances burned into the skin) and setons (strands drawn through folds of skin). Others advised vesication, blisters, and inoculation with the "itch". Frightening patients, threatening them with death, the discharging of firearms near them, were methods in common use.

One physician, circa 1790, author of a text book of medicine, wrote that "patients are to be struck with terror and fear, and driven to despair; labor of draught cattle to be imposed upon them, and assiduously continued. Diet, as poor as possible. To be immersed in water as cold as possible, and kept under it, covered all over, for a long time, until they are near killed."

Esquirol, 1772-1840 followed Pinel, 1745-1826, in France and Tuke (1733-1822), in England, all were leaders in the movement for bringing about more rational and humane care of the mentally ill. Esquirol used the cold bath immersal, the cautery, and methods of terrifying patients. However, he concluded, "We cannot conceal the fact, that the success attributed to heroic remedies is far less great, than that obtained from a good tendency given to maniacs and those attending to them, by a suitable regimen and by a wise expectation, and that it is preferable to look to time and to the efforts of nature, rather than the employment of medicines (and methods) often hazardous, rarely useful, and sometimes dangerous."

It appears that many of the above described methods of treatment, used for centuries previous to the past century, were administered for the purpose of (1) arousing those too much abandoned to inactivity, (2) subduing excitements. They seem to have much in common with the so-called shock therapies so much in vogue today. Certainly the recently developed shock therapies, the insulin therapy and the metrazol convulsive therapy, are as empirical in their conception as the older shock therapies used. They are perhaps more refined methods, but the general principle seems to be the same. They are scarcely more humane. Patients receiving metrazol therapy, at least, are very much terrified by their reactions to treatment and express this in many ways. Some say that they feel as though they had been through hell; others express the sensation as one of being struck by lightning, or blown up by dynamite. Some tremble and become very agitated and fearful at the approach of the physician who administers the treatment.

Doctor Stanley Cobb[7], discusses well the irrationality of the theory of the mechanism of cure in insulin shock therapy as propounded by Sakel, the originator of the therapy. Doctor Cobb also calls attention to the dangers of this form of treatment (mortality 1½ to 2 per cent) and concludes that "there is some reason to believe that it may be causing permanent damage to the brains of patients who might spontaneously recover."

It is not to be forgotten that most psychiatrists agree that schizophrenia is not a disease entity. Quoted from Noyes[8].

". . . . these disorders (schizophrenic reactions) represent faulty psychological methods of adjustment the forms of which are determined in part by innate psychological inadequacy, in part by progressively faulty responses and un-

healthful habits of thinking and feeling and in part by psychological events and experiences, including emotionally determined complexes and mental conflicts—in short, by forces that have long tended to disorganize the personality . . . . an inferior type of sociobiologic reaction, occurring in response to the stresses of life situations, problems and experiences in individuals perhaps predisposed by reason of a special constitution and personality make-up."

If we are to accept this conception of schizophrenia, and it seems the most logical one, it can scarcely be correlated with the claims of the shock therapy enthusiasts. In many cases, it is exceedingly difficult to draw the dividing line between some schizophrenic individuals and normal introverted persons. Are we to expect to change a person's personality, his distinguishing characteristics, conditional, psychic, and otherwise, by a shock therapy? Further, it is well established that many schizophrenics, especially the hebephrenic-catatonic types, have inferior physical constitutions. Can we expect by shock therapy to modify such constitutional anomalies, as the small hearts and small arterial systems, and the polyendocrine scleroses which many schizophrenics exhibit?

The following abstract of the history of a schizophrenic patient in this hospital is given. It is fairly typical of many cases of schizophrenia. It seems illogical to expect a recovery with any form of treatment.

CASE REPORT:

C. H.; white, female, aged 27. No family history of mental disease. As a baby she was different from her brothers and sisters. She cried a great deal and did not take nourishment well. As a child and as an adolescent, she was shy and reticent. She did not play much with other children. She got along fairly well in grade school but upon reaching high school she made no further progress. She had always worried about her school work and had studied hard. For fear of being late, she would insist upon arriving at school as much as an hour early. She was always sensitive, cold and reserved. She seemed to be lacking in sympathy and affection for members of the family. In early adolescence, at a time when her sister was thought to be dying from diphtheria, she seemed to be curiously indifferent about it. After being taken from high school, she stayed at home and took little interest in anything. She gradually turned against members of the family, was quite quarrelsome and irritable, and this, chiefly, resulted in her state hospital commitment. Since being in the hospital, she has been apathetic and indifferent. She refuses to be employed, or to take part in recreational activities. She has no definite delusions or hallucinations. Physically she is frail, asthenic, and exhibits the thymolymphatic constitution.

If a shock therapy is to cure this individual, is it to be expected that it will change personality traits that date back to childhood? Or to modify her constitutional characteristics which seem, a priori, to negate against a normal development?

As for my own experience in the treatment of schizophrenia by the convulsive therapy, we have, at the Columbus State Hospital, completed treatment on 30 cases. Of 12 comparatively recent cases, the psychoses being not over two years' duration, five secured remissions, three were improved, and four unimproved. The five would have had good prognoses. One case was a catatonic who had been ill less than a month; one was a feeble-minded youth who had had a mild excitement, showing some schizophrenic traits; one was well on the road to recovery when treatment was begun; two cases of catatonic excitement obtained their remissions several months after treatment was stopped. Of 18 chronic (over two years) cases treated, 15 were unimproved, 2 improved, and one had a remission. The latter was probably a case of stuporous depression, of the manic depressive type, his psychosis having a schizoid coloring. Probably he would have recovered without treatment. One hysterical case, a woman who had to be force-fed and who refused to get out of bed, was very markedly improved after a few injections of metrazol. The majority of cases treated showed improvement some time during the course of their therapy. As the above figures show, most relapsed after treatment was discontinued. Psychotherapy was not neglected in the treatment of our cases. They were given special attention as regards occupational and recreational therapy, and were frequently interviewed by attending physicians.

It is not to be forgotten that a considerable number of schizophrenics have remissions and make recoveries with ordinary safe, sane methods of treatment. The report of Bond and Braceland[9], in regard to the recovery rate seems to accord with the findings of others and the impressions of clinical experience. Their findings were as follows: After five years, 10 per cent full recoveries; percentage of recovered plus improved 31 per cent; if added to the cases diagnosed as dementia praecox are added those cases which had symptoms which strongly suggested this diagnosis, the percentage of full recoveries is 20 per cent, and of recovery and improvement together 40 per cent.

It seems very doubtful that, after five years, the cases treated with the shock therapies will show a higher recovery and improvement rate.

In connection with the shock therapies, the psychoanalysts have talked much about "the death threat" being the possible mechanism in cases which are benefited. Here again, this is only a recognition of a principle known to the ancients. In fact, it seems that the most enlightened of the ancients and comparatively ancient, discarded this mode of therapy.

Schizophrenia represents psychologically a flight from reality, an escape from an intolerable situation. Various methods of producing shock,

and painful stimuli may, temporarily at least, divert the schizophrenic individual from his self-absorbed phantasy life and bring him back to reality. It is also possible that the methods used to produce shock bring about temporary circulatory changes which are of benefit to individuals who have inadequate circulatory systems. Cold wet packs (a refinement of the surprise immersion bath) are reputed to produce a "hydro-therapeutic shock" whereby circulation is accelerated, and, allegedly, a cardiovascular massage obtained. Other agents are capable of bringing about a temporary restoration to normal in certain schizophrenics: sodium amytal; carbon dioxide inhalations, alcohol, etc.

CONCLUSIONS

The recently introduced shock therapies of schizophrenia, so much in vogue today, harp back to methods of treatment, which, having been tested for centuries, were discarded.

They are empirical, illogical, and not in accordance with the principles of humane care of the mentally ill. They (at least the insulin shock therapy) have brought about deaths of individuals who would have had a fair chance of recovery from their mental illnesses.

To accept the shock therapies as almost specifics for schizophrenia (their originators claim over 80 per cent cures in recent cases) would mean that we should have to disregard most of our conceptions about this disease.

Before talking about cures of schizophrenia, there should be some generally accepted delimitations of the disease. The current conception today is that those individuals roughly diagnosed as schizophrenics, do not have symptoms comprising a disease entity; that what is termed schizophrenia represents a certain type of personality reaction, based in part perhaps on innate constitutional inadequacies, in part on a corresponding psychological inadequacy, and precipitated perhaps by certain situations of environmental stress and strain.

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Bleeding Tendency in Jaundice

Two very distressing complications are frequently encountered after surgery on the bile tract. The first is hemorrhage. The bleeding tendency in jaundice is undoubtedly related to the degree of liver damage. The mechanism of this relation is obscure, but the clinical facts are obvious. According to the reports from several clinics, 50 per cent of all postoperative deaths in patients with jaundice, or liver insufficiency, are associated with or the result of hemorrhage. Many clinical and laboratory methods have been recommended to determine the existence of the bleeding tendency, but none have been accepted as a reliable guide. As Colbeck has said, there is no definite method as yet for the evaluation of the bleeding tendency in jaundice.

The "venostasis bleeding time," suggested by the author, has been used successfully by McNealy and others. The method consists in placing a sphygmomanometer cuff about the upper arm with a pressure of 40 mm. Hg. to prevent venous return. This was done to increase the pressure in the peripheral vessels with the idea that the effect of any defect in retractility of the vessels, in clotting time, or in the firmness of the clot might be exaggerated. The skin of the forearm near the elbow over the pronator muscles is the site of the puncture. The puncture is made with a mechanical stylet set at a uniform depth. We used a depth of 3.0 mm. This gave a bleeding time in over 100 normal subjects ranging from thirty seconds to three minutes. The upper limit of normal was set at 240 seconds. The blood was blotted with filter paper every ten or fifteen seconds.

Bile salts were administered to jaundiced patients with the viosterol, Vitamin D, to insure its absorption.

A second complication, which does not occur as frequently as hemorrhage after surgery on the bile tract, is the so-called "liver death." This condition is characterized by a rise in temperature and pulse rate, anuria and uremic manifestation (azotemia). Autopsy reveals extensive regeneration of the liver and renal parenchyma. "Liver death" may also occur after traumatic rupture of the liver.—A. C. Ivy, M.D., Chicago; Jr. Mich. State Med. Soc., Vol. 37, No. 2; February, 1938.

Vitamin A as brought out by Amy Daniels and recently by Cody who, working on the effects of vitamin deficiency diets, maintain that Vitamin A in the diet is necessary to uphold the nutrition of the nasal, aural and tracheal mucosa. Vitamin A increases the resistance to upper respiratory infections in children.—S. M. Morwitz, M.D., F. A. C. S., Chicago; Ill. Med. Jr., Vol. 73; No. 2, February, 1938.

MELANOSARCOMA OF THE CHOROID: CASE REPORTS

By H. V. PHELAN, M.D., CLEVELAND, OHIO

THESE cases are presented for several reasons: First, their relative frequency. Second, the need for early diagnosis. Third, the importance attached to the necessity for all patients having symptoms referable to the eyes that they be examined only by those who through training in medicine are competent to interpret their findings. The relative frequency of this condition varies from .03 to .06 per cent of all pathological conditions found in eye clinics. They are therefore removed from the category of infrequent occurrence. Carcinoma is not found in the eye except as a metastatic affair. Injury and chronic inflammatory conditions of the eye is not an etiological factor. Their occurrence varies from 10 to 80 years of age with the greatest frequency being from 30 to 60. The most common location for the condition is in the region of the ciliary body, consequently they are frequently not recognized by a casual examination.

The course of the disease is divided into four stages. The first or early stage lasts from six to twelve months, the chief symptoms being some impairment of vision. In the second stage the tension of the eye increases and the appearance is that of acute glaucoma. If there is considerable detachment of the retina the tension of the eye will be below normal and the chief symptom is loss of part of the visual field. This is always followed by the glaucomatous stage. This period varies from six to twelve months to be followed by the third stage, perforation of the globe and finally by extensive involvement of the orbit. Fifty per cent of all cases can be cured by the early diagnosis and enucleation of the eye. I am presenting here only four cases, but they will illustrate my third reason for presenting this paper to you.

Case 1. This patient was seen within six weeks from the time he first complained of impaired vision. At that time there was only a small area of retinal detachment anterior in the right eye which was opaque to transillumination. A diagnosis was made of sarcoma and enucleation advised. This was done and then a cross fire of radium given of 1500 mghr at two different days. He is alive and well six years after operation. The pathological report did not substantiate our clinical findings but there was an increase of the pigment in the ciliary body and cell formation which from experience we know is the first stage seen in sarcoma.

Case 2. Was seen in an attack of acute glaucoma. Patient gave history of having first noticed impairment of vision nine months previous. She consulted an optician, or optometrist, who said she needed glasses and fitted her for them. She frequently returned to him and each time he gave her a new pair and sent her on her way. I was suspicious of tumor but to be on the safe side I decided to do an iridectomy at which time the tumor was visible. Enucleation was advised but this was not consented to for three weeks. She received the usual radium treatment of 1500 mghrs. Six months later she died from metastasis to the brain.

Case 3. For five months before first visit to me he complained of impaired vision. A diagnosis was made of sarcoma of the choroid and immediate enucleation advised. This was done and the usual radium treatment given. This patient is alive six years after the operation, but is now showing definite involvement of the orbit and antrum.

Case 4. First noticed failing vision over a year prior to my first consultation. At that time she consulted an optician, or optometrist, who sold her some glasses and sent her on her way. She later consulted an out of town oculist who diagnosed tumor and advised enucleation. She was not satisfied and did not have it done. I saw her several months ago in the glaucomatous stage an advised immediate enucleation. The eye was nearly filled with sarcomatous tissue. She lived six months after this, dying of metastasis to the brain.

My mortality is 50 per cent. If seen early the cure is fairly certain. If seen late in the glaucomatous stage the termination is always fatal. Both cases that terminated fatally were seen by those who are not competent to advise patients who have impairment of vision. Those cured were those seen in the early stage and diagnosed. This is only one instance of the need for all patients having symptoms referable to the eye to be seen by an oculist. As one of America's outstanding oculists said in regard to the jewelry and department store eye specialist of opticians and optometrists was: "Under 40 no eye can be fitted correctly for glasses without a midriatic—they are prohibited by law from using it. After 40 the pathological conditions of the eye are more prevalent and they are not competent to diagnose them. Consequently there is no reason for their existence."

I sincerely hope that whenever a member of this group has a patient who complains of eye disturbance that he will not say as some doctors say, "get your eyes examined." The public is not educated to the difference between the many confusing names. It is your obligation and duty to see that they get an oculist for his opinion and care, as no one else is competent to diagnose and treat pathological eye conditions.

1058 ROSE BUILDING.

The Author

● Dr. Phelan is a graduate of Georgetown University, 1921; member Cleveland Ophthalmological Club; Cleveland Otolaryngological Club; Cleveland Medical Library Association; opthalmologist, St. Alexis Hospital.

CASE RECORD PRESENTING CLINICAL PROBLEMS

A 66 year old white male was admitted to the Hospital, complaining of an "Infected Right Foot"

By HARRY L. REINHART, M.D.

THE patient, aged 66 years, was a diabetic of aproximately 23 years standing and had been taking insulin for about eight years. His weight had been maintained at 172 pounds until two years before admission, during which time his weight had decreased about 20 pounds. He had been in good general health, until two months before admission at which time he stepped on a nail receiving a puncture wound in the ball of the right foot. This wounded area soon became red and swollen and seeped a serous discharge. It improved gradually until one month before admission when he received a large burn over the medial aspect of the right foot and ankle from the application of heat. Following this burn the entire foot became swollen, black, and a foul purulent discharge appeared. The foot became steadily worse and this was the condition for which he was admitted to the hospital.

P. E.—Temp. 101°, P. 100, R. 17. A well developed, somewhat undernourished, elderly white male, 66 years of age, acutely ill and in moderate pain from the right ankle. The skin is pale and cool, except for the right foot and ankle. Teeth—complete edentia. The lips and mucous membranes are pale. The mouth, throat and tonsils are negative. No lymphadenopathy. The lungs are clear to ausculation and percussion. The heart is not enlarged; sounds are of good quality; no murmurs. A_2 is greater than P_2. B. P. 122/70. Abdomen negative. Rectal examination revealed a benign hypertrophy of the prostate. Extremities—there is a large red, hot, fluctuant abscess over the external malleolus of the right ankle. A crater-like ulcer is present in the area of the internal malleolus and a deep cellulitis with many draining sinuses extends over the dorsum of the right foot.

Laboratory Work: Admission blood count: Hb. 60 per cent; R.B.C. 2,900,000; W.B.C. 16,150; polys 86 per cent. First post operative day: Hb. 60 per cent; R.B.C. 3,030,000; W.B.C. 13,500; polys 84 per cent. Urine: Acid, sp. gr. 1,014; albumin 40 mgm. per cent; 1 W.B.C./H.P.F.; occasional granular cast. No sugar, acetone or diacetic acid. Pus from right ankle—smear—numerous gram negative and gram positive cocci. Blood culture—for anaerobic bacteria negative. Tissue culture (in brain broth) from muscle biospies at time of amputation—large amounts of gas produced under anaerobic conditions. Blood sugar—on admission 285 mgm. per cent. CO_2—54 vol. per cent. First post operative day, blood sugar 362 mgm. per cent. CO_2—59 vol per cent.

Hospital Course: By the morning after admission, crepitation was noticed up to the mid-calf of the right leg. A high mid-thigh amputation was immediately done, at which time muscle biopsies were obtained from both the thigh and calf of the leg for culture. The temperature fluctuated between 98-100.6° for the next 36 hours. A sero-sanguinous discharge and crepitation appeared in the stump and was treated by irrigation with H_2O_2 solution. X-ray therapy to the stump was of no avail. The temperature rose suddenly to 103.4° and pulse to 120 on the second postoperative day. Only small amounts of sugar and no acetone or diacetic were found in the urine during the entire hospital course. Temperature remained between 103 and 104° and his course was gradually downhill. Death occurred on the fifth postoperative day.

Dr. J. R. Reeves, Commentator:

The case as presented is a very good example of what may happen after surgery in patients with diabetes mellitus. The exact nature of the systemic changes making a diabetic individual more susceptible to infection is not known, but that it is directly traceable to the faulty metabolism of one or all of three constituents of diet, namely carbohydrate, protein and fat seems certain. Supporting the observation that the poor resistance to infection may be due to faulty tissue metabolism as the basic change in diabetic tissues, is the presence of a similar tendency in non-diabetic senile individuals and in patients with vascular disease and circulatory failure.

Anaerobic bacteria are particularly prone to infest muscle tissues in patients of the types described above, whether the exciting cause be pyogenic infection, surgery or accidental trauma. Muscle tissue with lowered resistance due to a poor blood supply and poor cellular metabolism when injured is excellent soil for growth of numerous types of anaerobic bacteria. These bacteria are usually present on the surface of the body, in the gastrointestinal tract and even in the muscles of many of the patients before surgery. Therefore, the proper management of such patients constitutes a very definite problem.

This case presented upon admission a large, infected ulceration on the medial aspect of the right foot and before the leg was amputated, gas forming anaerobic bacilli were cultured from the gastrocnemius and the quadriceps femoris muscles, the latter being in the area of the amputation. Therefore, it would seem that the trauma and concomitant disturbance of blood supply with necrosis incident to the amputation would supply a fertile field for the rapid growth of these anaerobic bacteria. That such was the case is demonstrated in the subsequent course.

In infections with anaerobic bacteria the knowledge of the specific type of bacteria involved and the character of the disease resulting from such specific types is just as essential as the specific differentiation of the common aerobic bacteria. The difficulties incident to culture, differentiation

This is the twenty-seventh of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

and classification have so far resisted the practical determination of the various types of these bacteria for clinical diagnosis. Hence, it is necessary to depend largely upon the clinical manifestations for differentiation.

Infections by the gas producing anaerobes which occur in old people with arteriosclerotic vascular disease, or diabetes mellitus, often following amputation or appearing after bruises in which the skin is not broken, or after the parenteral injection of drugs or hypodermoclysis are not usually due to Clostridium Welchii. The clinical picture of the above group as compared with true Clostridium Welchii infections, is relatively mild, the temperature range is from 100° to 102°F., white blood cells from 10,000 to 15,000 and there is no jaundice, hemolysis or secondary anemia. The infected part gives off a foul odor and contains foul smelling gas, the muscles are blackened and often reduced to a thick black paste, the skin is bronzed or purple and the hair of the skin maintains its normal firm attachment. The line of demarcation is usually prominent. In true Clostridium Welchii gas gangrene there is nearly always a history or evidence of trauma with direct contamination: infection may occur at any age; severe pain is present at the site of the infections, and the temperature rises rapidly to 103° or 104°. The white blood cell count ranges from 25,000 to 90,000, red blood cells may fall to 1,000,000 in 24 hours as the result of hemolysis and some degree of secondary anemia is always present. Jaundice or a greenish pallor is present in more than 50 per cent of the cases. The patient perspires freely and is very toxic. The infected area is indurated and crepitant; the skin is often reddened but not otherwise discolored, the hair may be pulled out easily; the infected muscles are red; the wound exudes a red, hemolyzed serum and a gas, which does not have a putrefactive odor. Demarcation is not prominent, since the gas infiltrates along the muscular planes at some distance from the site of infection.

I have recently seen a boy who fell from a cherry tree and suffered a compound fracture of the humerus at the elbow joint, the proximal fragment being thrust into the soil. Open reduction was done and the wound closed tightly. Thirty-six hours later the muscles around the elbow were crepitant and 48 hours later the boy was extremely jaundiced and had a temperature of 104°. Clostridium Welchii were recovered, with other organisms, from the wound and in apparently pure culture from the blood stream. Recovery followed amputation below the shoulder and the administration of 100,000 units of Clostridium Welchii antitoxin. Fortunately for the patient, the organism recovered was only mildly toxic, testing 1 to 2 in our hands.

The various pathogenic organisms that cause true gas gangrene (e.g. Clostridium Welchii) are distinct species, belonging mostly to the saccharolytic group; they are similar in morphology to one another and are also similar to numerous species of putrefactive proteolytic bacilli, only a few of which have so far been classified. There are myriads of these putrefactive, anaerobic bacilli, which also form gas, lying dormant in the soil, periodically growing on bits of decaying organic matter and thereby maintaining their numbers. These organisms constantly contaminate food and it has been shown experimentally that they utilize the tissues and organs of animals to continue their existence. Evidence has been and still is being accumulated in this laboratory indicating that in the latter decades of life, the organs and muscles of individuals may become contaminated by these saprophytes of putrefactive type, and that under certain conditions of lowered resistance they begin the destruction of the tissues before death. We believe that the type of putrefactive gas gangrene appearing mysteriously in older people, and those suffering from diabetes, arteriosclerosis and circulatory failure, is caused by these saprophytic bacteria already present in the tissue injured or deprived of its blood supply. All that is necessary for their growth is death of tissue. In dogs known to harbor similar organisms in their tissues, putrefactive gaseous lesions may be produced by trauma to muscles or the injection of toxic substances. These infections readily respond to adequate drainage, resection of the dead muscle and supportive care.

In human subjects harboring the putrefactive type of anaerobes, treatment should be directed toward improvement of circulation, control of diabetes and removal of dead muscle. Certainly, radical amputations are not warranted and specific Clostridium Welchii antitoxin is useless. In true Clostridium Welchii gas gangrene, antitoxin seems to be most valuable as a prophylactic agent. When the infection is established, it becomes a therapeutic aid second only in value to its early prophylactic use and debridement.

Dr. Reinhart: Anatomical Diagnosis:

1. Absence of right leg and lower third of right thigh; recent surgical amputation.
2. Acute gas gangrene infection of stump of right thigh.
3. Generalized arteriosclerosis with moderate involvement of femoral and coronary arteries. Arteriosclerotic nephropathy.
4. Cystadenomatous hypertrophy of prostate.
5. Meckel's diverticulum and diverticulosis of small intestines.

The clinical history and hyperglycemia substantiate the diagnosis of diabetes mellitus, which was apparently of moderate severity and fairly well controlled during the infection which dominated the clinical course of the case in this hos-

pital. Two interesting questions are raised by this case,—the relation between arteriosclerosis and diabetes and the relation between infection and diabetes.

Atherosclerosis is often stated to be a consequence of uncontrolled diabetes. Such a statement would imply that the incidence of atherosclerosis may be decreased with the control of the diabetes. The belief is also prevalent that the modern high carbohydrate, balanced nitrogen, low fat and slightly reduced total calorie diets, with adequate insulin will reduce the incidence of atherosclerosis. Practically, atherosclerosis is common in elderly individuals and more diabetics live to an elderly age since the advent of insulin and many of these die of the complications of atherosclerosis as is manifest in this case.

Rabinowitch states that "of all conditions which tend to lower carbohydrate metabolism infection stands at the head of the list with respect to frequency and capacity to do harm". The susceptibility of the diabetic to infection is well known. Experimental evidence suggests that this susceptibility may be due to a disordered cell nutrition and a diminution of cell glycogen reserve, loss of phagocytic power of the leucocytes, and the ability of proteolytic ferments from disintegrating leucocytes and organ cells to neutralize endogenous and exogenous insulin. Infection in the diabetic is a two edged sword, which may destroy the individual per se or precipitate the severest grade of diabetes with complete loss of carbohydrate tolerance, or both.

Traumatic Postpartum Hemorrhage

Let us first consider traumatic hemorrhage. Broadly speaking, bleeding with a hard uterus usually comes from laceration. After forceps or other operations, lacerations are to be looked for and they will be found in the operative field. Lacerations of the genital tract are more frequently the cause of hemorrhage than is generally supposed. These lacerations may occur at the pelvic outlet in the lateral vaginal walls, vaginal fornix, the cervix or the lower uterine segment.

Tears of the outlet are easily seen. Tears of the vaginal fornix and cervix can be seen with the aid of vaginal retractor or speculum. The patient should be placed in the lithotomy position, properly draped to avoid infection, and then the speculi inserted, the vagina wiped free of all blood-clots, the cervix grasped with a sponge forceps and brought to the vaginal orifice where a careful inspection can be made and the vaginal vaults explored. When lacerations are found they can usually be sutured without difficulty and the bleeding controlled. I want to emphasize again the importance of diagnosis—Clarence A. DePuy, M.D., Oakland, Calif.; Calif. & Western Med., Vol. 47, No. 4; Oct., 1937.

A Correction

The accompanying is a correction of the table which appeared on page 274 of the March issue of *The Journal*, in the article on Panhysterectomy, by William H. Weir, M.D. of Cleveland. The corrected table is as follows:

Results in 25 Cancer Cases
in last nine years

	Alive		Died Postop.	Died Later	?
Over 5 yrs.	Cerv	4	1	3	2
	Fund	4	1	0	0
Under 5 yrs.	Cerv	2	0	0	1
	Fund	7	0	0	0
		17	2	3	3

Impaired Hearing from Certain Drugs and Chemical Poisons

As has been clinically, experimentally and pathologically demonstrated, some drugs and chemicals have a selective action for the auditory apparatus. They may cause deafness and may also injure the cortical center of hearing. Idiosyncrasy for drugs, peculiar to many persons, may be an important factor in determining the cause of nerve deafness. Since the placenta is permeable to drugs capable of causing nerve deafness, the administration of such drugs during pregnancy may endanger the ear of the unborn child. In this particular, quinine is the most important of these drugs for it is used frequently in the induction of labor, in the treatment of diseases concurrent with pregnancy and as an abortifacient. In addition to quinine, chief among the drugs causing nerve deafness, the salicylates and alcohol are often causative agents: less frequently are tobacco, arsenic, lead phorphorus, carbon monoxide, carbon disulphide, oil of chenopodium, mercury, morphine and anilin dyes. Drugs and industrial poisons capable of damaging the auditory apparatus deserve greater consideration and more careful study as etiologic factors of deafness.—H. Marshall Taylor, M.D., Jacksonville, Florida; The Jour. of the Florida Med. Assn. Vol. XXIV, No. 7, January, 1938.

Orbital Tumors

Gliomas are generally confined to children under five years of age. This condition is occasionally bilateral. The prognosis is fairly good if early diagnosis and surgical removal is done. In surgical removal, the optic nerve should be cut as far back as possible. In the differential diagnosis one must consider pseudoglioma arising from massive exudates in the vitreous and also phthisis bulbi which may simulate glioma.—D. A. Bartley, M.D., Indianapolis, Ind.; Jr. of the Ind. State Med. Assn., Vol. 31, No. 2; February, 1938.

TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by the Component Society, the Ohio Public Health Association

NATURE OF THE EARLY LESION

The small tuberculous lesion first discovered in the lung is not necessarily an early one. The lesion that is not only small but also recently developed, may be caused by infection from without or by an extension from preexisting lesions, usually tiny or even microscopic, which, for a short or long time, have lain dormant and concealed. Previous examinations, therefore, may have revealed nothing abnormal except perhaps an apparently insignificant apical scar or a calcified hilar lymph node. The development of the early lesion, often called the early infiltration, may be rather abrupt, that is, within a week or a month, or it may be gradual with static periods of apparent quiescence. Rapidity of development, however, is one of its common characteristics. Pathologically it is a patch of tuberculous bronchopneumonia, occupying a section of the parenchyma usually not more than 2 or 3 cm. in diameter, sometimes at the apex but more often just below. The patient has no symptoms or only slight to moderate constitutional ones, chiefly a loss of a few pounds of weight and a little undue fatigue. Fever is not usually detected, and cough, expectoration and bloody sputum are rare at this stage. In some cases a patch of fine râles may be heard directly over the small lesion, but more often the physical examination reveals nothing abnormal in the chest. The roentgenogram shows, as a rule, the small area of soft infiltration in one lung. Tubercle bacilli are not found in the sputum unless the lesion has caseated and broken into a bronchus, and this is not the condition at the very onset.

Case-finding surveys among apparently healthy persons have shown that while no age is immune to tuberculosis, the peak of development is between adolescence and the late twenties. Fellows, in a study of annual examinations of a clerical force of about 10,000 women and 2,000 men, found that in a 5-year period clinical pulmonary tuberculosis developed in 142 previously healthy persons, of whom 83 per cent were between the ages of 18 and 27.

DIAGNOSIS

The early lesion will be discovered in only a small minority of cases unless organized searches for it are made periodically. The patient, having few or no symptoms of illness, does not seek the physician. Rather, the physician, in his capacity as a farseeing health officer, must seek the patient. Tuberculin testing and X-ray examination of the chest, wisely planned and applied, are indispensable parts of the diagnostic method. If the diagnosis is adequate, it will include not only a recording of the lesion but also an interpretation of its potential significance and the need for treatment. The small size of the infiltration, the lack of symptoms, and the failure to find tubercle bacilli in the sputum often cloak the situation with a grossly undeserved aspect of innocence.

SUBSEQUENT BEHAVIOR OF THE LESION

The early infiltration may be absorbed almost completely, leaving behind a small scar, or it may spread, become caseated and liquefied at its center and ulcerate into a bronchus, whence other parts of the lung may become contaminated, the beginning of advanced tuberculosis. Absorption, if it occurs, is slow. The tendency to central caseation is a predominant one, varying in intensity and rapidity. After ulceration and excavation of the lesion occurs, the rate and extent of formation of secondary lesions vary within wide limits. Acute bilateral tuberculous bronchopneumonia may be set up within a few weeks. More often the extensions occur at irregular intervals, and gradually the case drifts into the confirmed chronic state. The eventual contamination and infection of the larynx, intestine and other related structures by the bacilliferous discharges from the pulmonary cavities is frequent.

The frequency of spontaneous healing of untreated early lesions is a matter for further investigation. The most optimistic observers estimate that as high as 40 per cent of the lesion may heal completely. I am reasonably certain, after ten years of special attention to the point, that the majority of early infiltrations developing in young people progress and undergo excavation if they are not promptly and properly treated.

MOST SERIOUS TUBERCULOSIS RELATED TO EARLY LESION

Sufficient information has been accumulated by the pathologists and from a study of pathogenesis in the living to warrant the conclusion that most disabling and fatal tuberculosis originates from the one innocent-appearing early infiltration. An appreciation of this linkage has been lacking until recent years yet is one of the most important and basic principles in treatment and control. The conception, to be complete, includes the element of time relationships, because, as stated, the extension from the early lesion may be rapid or slow, limited or wide, continuous

or discontinuous. Connecting this conception with the evidence that most early pulmonary infiltrations put in their appearance between adolescence and the late twenties, it follows that advanced tuberculosis is unlikely to develop in a person past 30 unless he has acquired a considerable lesion before this age.

METHOD OF TREATMENT

The tendency is for the early lesion to caseate rapidly. Treatment should aim to prevent, retard or arrest the process. The sooner and the more strictly the rest cure in a sanatorium can be instituted, the more effective it is likely to be. In many cases the treatment of the first few weeks is the most important of all. The younger the person, the more labile the lesion is likely to be and the greater the need for prolonged rest. Consideration of the potential hazard of the lesion, as already discussed, and of the desirability of permanent recovery with the least sacrifice of function often takes precedence and dictates continuation of rest in bed well beyond the time when symptoms have subsided and the hematologic picture is normal. From six to twelve months of sanatorium care is advantageous. Most patients can then gradually resume activities, but a definite limitation of these for another year is usually necessary. Pneumothorax or temporary paralysis of the diaphragm may give the necessary lift to the patient who, on rest treatment alone, does not show definite and steady favorable progress.

RESULTS OF TREATMENT

I can speak of an experience with more than 100 cases in which the lesions were actually early, since previous roentgenograms showed no disease; they occurred in young people, and observation was possible from one to ten years afterward. This is supplemented by consideration of many hundreds of other cases of rather recent origin in which the duration and course of the disease was reasonably clear though not always verifiable. The experience is not adequate for statistical presentation and I give only a considered judgment, based more on an intensive study of individual cases than on groups. Thus far, most of the untreated cases have progressed into advanced disease. Patients treated promptly and with bed rest at the start have recovered without progression of the lesion in about 90 per cent of the instances. In most of the others, advancement or relapse, if any, has been promptly detected and usually controlled by artificial pneumothorax. Considering permanence of recovery, preservation of pulmonary function and working ability after treatment, the experience has been much superior to any other plan attempted.—The Lasting Cure of Early Pulmonary Tuberculosis, J. Burns Amberson, Jr., M.D., Jour. of the A.M.A., Dec. 11, 1937.

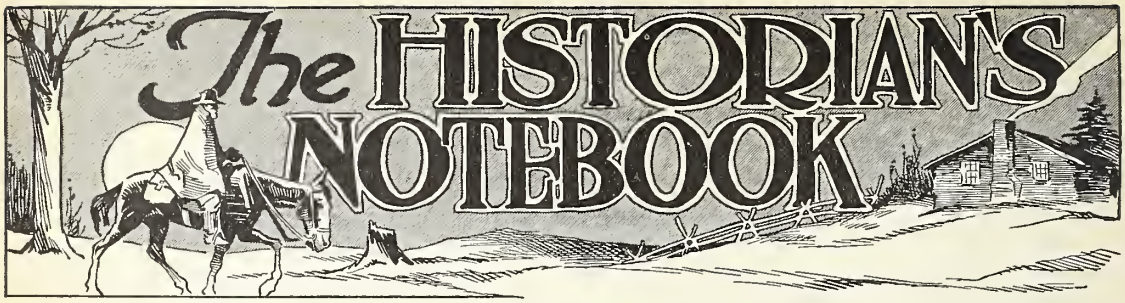
Phrenic Nerve Surgery

It is well to remember in conclusion then that in paralyzing the diaphragm, we are attacking one of the main motivating forces of the respiratory mechanism. Judging from the glib manner in which some have advised its permanent paralysis in a hit or miss manner, "to see what will happen," its true importance has apparently not been realized. It is of benefit to make a fluoroscopic study of its action after violent exercise; during singing; talking; coughing; sneezing and again during quiet breathing, and visualize its cardinal importance in every phase of respiration, and respect it accordingly. How often has a thoracic surgeon inherited a patient whose permanently paralyzed hemidiaphragm precludes contralateral thoracoplasty or other surgical procedures because the end result would be a distressingly dyspneic patient!

In phrenic nerve procedures as in all chest surgery an attempt should be made to preserve all the breathing space consistent with efficient and sufficient compression, and to interfere as little as possible with the mechanism of the breathing apparatus in order to give the patient his best chance of competing in a world from which he has been absent from one to many years. He will be useful to himself and others in proportion to the efficiency of his breathing apparatus. This does not mean that adequate surgery should not be done, but on the other hand we are not justified in permanently destroying the function of such an important organ as the diaphragm without having proven to ourselves our honest right to do so. This is accomplished by first interrupting the nerve temporarily and observing the results obtained, then deciding, after regeneration has occurred, what the next step shall be—nothing, rephraxis or severence. Keeping before us the vision of our patient during the years to come after he has left us, we may deem it wise to crush the phrenic nerve two or three times, allowing an interval between each phraxis to reestablish muscular tone of the diaphragm. As has been aptly said, the victory is not in removing or destroying the organ but in saving it —an organ which has been called the second most important muscle in the body.—Earl E. Carpenter, M.D., Superior, Wisconsin; Diseases of the Chest, Vol. IV, No. 3, March, 1938.

Symptoms are more than the reaction of cells in the soma; they may be induced or altered by the relation of the personality to society.—Fetterman.

A physician can sometimes parry the scythe of death, but has no power over the sand in the hourglass.—Mrs. Thrale.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

DR. LUTHER SPELMAN, EARLY PHYSICIAN OF THE WESTERN RESERVE

By JAMES J. TYLER, M.D., WARREN, OHIO

DR LUTHER SPELMAN, son of John and Damaris (Rose) Spelman, was born in Granville, Mass., July 27, 1779. Thomas Spelman, ancestor of the Spelman family and one of the first settlers in Granville, originated from Middletown, Connecticut. The father, John Spelman, was a cook for General Washington while his army was encamped at Morristown, New Jersey. Dr. Spelman studied medicine under Dr. Harvey of Massachusetts. He married, in 1804, Miss Anna Vail of Morristown and with his wife and two children emigrated to Deerfield, Portage county, Ohio, in the year 1808.

After a sojourn of one year the family removed to Youngstown, then in Trumbull county. In 1812 he was appointed as surgeon in one of the militia regiments of Ohio but did not go to the frontier. In 1813 he served as clerk of Youngstown township, having been preceded in this office by George Tod, 1802-04; William Rayen, 1805-1808, and 1810-1812; and Samuel Bryson, 1809. He was a resident of Youngstown in the following year, a daughter, Mary, having been born there in 1814. Shortly afterwards he settled at Petersburgh, Springfield township, Columbiana county, where he was probably the first physician to locate permanently in the village. (Petersburgh remained in Columbiana county until after the erection of Mahoning county in 1846.)

Dr. Spelman was an old schoolmate of Hon. Titus Hayes of Wayne, and on account of the friendship existing between the two families, was induced to remove to Wayne, Ashtabula county in 1823. He practiced medicine in Wayne and the adjacent townships for 40 years and died there, Sept. 3, 1863, aged 84 years. His wife died in the same town, March 12, 1870. The family consisted of eleven children. In 1832, he was elected one of the associate judges of Ashtabula county and served seven years. His records show that he received for his services during these years $520.25.

Among the records of Dr. Spelman is an "Invoice Book commenced January, 1811, in the state of Ohio." This record is interesting not only because it lists the drugs purchased and the prices paid by this physician but also because it sets forth the fact that he was able to purchase many of them on the Western Reserve, thus avoiding the necessity of shipment from Pittsburgh.

During the years 1811 to 1815, the following drugs were purchased:

Bot of Messers Skeltons of Pittsburgh. 1 oz. Gum Opium.....75c; 1 pair tooth forcepts.....$1.75.

Bot of Comfort S. Mygatt, Canfield, Ohio. 2 oz. Fol. Senna .....25c; 1 lb. Flor. Sulphur....37½c; ¼ lb. 01. Ricini.....50c; 1 lb Sal. Glaub. (Glauber's Salt).....31½c; 4 oz. Rad. Dyanthos (Dianthus) .....37½c; 1 oz. Rad. Ipecac, pulv.....$1.00; ½ doz. Small vials.....48c.

(Canfield was at this time a part of Trumbull county. In 1846, it became a part of Mahoning county, of which it was the first county seat. Comfort S. Mygatt, one of Canfield's earliest merchants, came from his home in Danbury, Connecticut, in 1807. Soon after reaching Canfield, Mr. Mygatt entered into partnership with Herman Canfield, and Zalmon Fitch, and opened a store of dry goods, groceries and general merchandise. The partnership was dissolved after about two years, and the business continued by Mr. Mygatt until his death in 1823. He was the

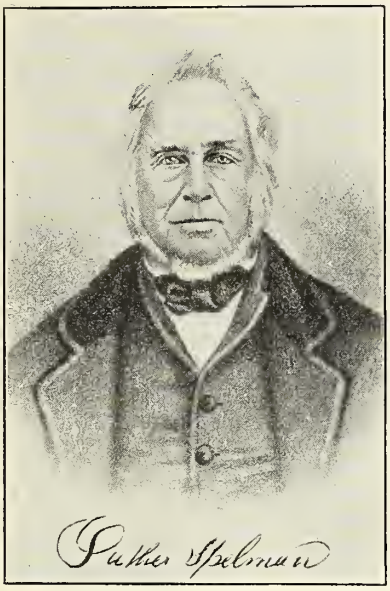
The Author

● **Dr. Tyler is a graduate of Western Reserve University School of Medicine; past president Trumbull County Medical Society; president medical staff, Warren City Hospital.**

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father of Dr. Eli Mygatt of Poland, Ohio, and the father-in-law of Hon. Elisha Whittlesey, first Comptroller of the Treasury of the United States).

Bot of Comfort S. Mygatt, Canfield, Ohio, April 5, 1811. 4 oz. Sac. Saturni (Lead Acetate—Sugar of Lead)....51c; 4 oz. Cort. Aurantium (Orange Peel)....25c; 1 oz. Magnesia Alba (Magesium Carbonate)....20c; 1 lb. Cremor Tartar (Potassium Bitartrate)....75c; 4 oz. Pulvis Rhei (Rhubarb)....96c; ½ lb. Rad. Zinziber (Zinziber-Ginger)....18 3/4c; 2 oz. Lapis Calaminaris (Calamine)....18 3/4c; 4 oz. Rad. Gingseng....30c.
Bot of Comfort S. Mygatt, Canfield, Ohio, May 2, 1811. ½ lb. Unguentum Citrinum (Ung. Hydrarg.



Nitratis—Citrine Ointment)....62½c; 1 bottle Oleum Amygdal Dulc. (Sweet Almond)....$1.25; 1 oz. Vitrolum Virides (Ferrous Sulphate—Green Vitriol)....6¼c; ½ doz. Vials....50c; ½ lb. Gum Guaiac (Guaiacum)....25c.

Bot of S. & W. Bryson. 1 oz. Cort. Peruv. (Peruvian Bark)....25c; 2 oz. 01. Amygdal Dulc....25c.

Bot of Comfort S. Mygatt, Canfield, Ohio, June 22, 1811. 4 oz. Pulv. Cort. Peru....75c; ½ oz. Calomel pwd....25c; ½ oz. Res. Sanders Rubr. (Red Saunders Resin)....6¼c; 1 oz. Fol. Sennae....18c; 4 oz. Sal. Nitre (Saltpeter)....25c; 4 oz. Sal Absinth (Wormwood)....9½c; 1 large vial....12½c; 2 small vials....18c; 1 lb. Gum Resin (Rosin)....19c.

Bot of Comfort S. Mygatt, Canfield, Ohio, Oct. 15, 1811 ½ oz. Cantharides....75c; 2½ oz. Conserve Rosa Rubi....20c; 1 oz. Pix Burgundica (Burgundy Pitch)....12c; 1 oz. Balsam Copavia (Copaiba)....25c; vial....8c; Elix. Vitriol (Sulphuric Acid)....12c; vial....8c.

Bot of Henry Wick. 4 oz. Merc. Ung. Fort (Ung. Hydrargyri—Mercurial Ointment)....50c; (Henry Wick and his wife Hannah Baldwin removed from Southampton, Long Island to Washington county, Pennsylvania. From Pennsylvania he moved to Youngstown in 1802 and commenced one of the pioneer merchantile businesses of that city. He was the father of Col. Caleb Baldwin Wick who in 1815, in partnership with Dr. Henry Manning commenced a country store connecting with it a drug store, the first in that part of the Reserve).

Bot of Comfort S. Mygatt, Canfield, Ohio, April 2, 1812. ¼ lb. Cort. Peruvi....75c; ½ lb. Flor. Sulphur....25c; 2 oz. Gum Ammoniac....36c 2 oz. Gum Aloes Soc (otrine)....50c; 1 oz. Gum Camphor....37½c; 2 oz. Gum Myrrh....50c; 2 oz. Fol. Sennae....36c; ½ lb. 01. Olivarium....37½c; 4 oz. Spt. Nitri Dulc....37½c; 4 oz. Rad. Dyanthos....37½c; 1 oz. Rad. Rhei, pulv....31c; 2 oz. Rad. Serp. Virginia (Virginia Sanke Root)....25c; 4 oz. Sac. Saturni....51c; 4 oz. Creme. Tartar....25c; 1 oz. Vitrol Album (Zinc Sulphate—White Vitriol)....8c; 4 oz. Pix Burgundica....37½c; 4 oz. Alumen (Alum)....5c; 1 bottle Opodeldoc (Soap Liniment)....50c; 2 oz. Rad. Glycyrrhizae....25c; 4 oz. Ol. Ricini....37¼c.

Bot of Messrs Skeltons, Pittsburgh, Pa., August 8, 1812. 2 dr. Sulphur Auratum Antimoni (Antimonium Sulphuratum—Kermes Mineral)....25c; 1 oz. Bals. Copavia....12c; ¼ lb. Cort. Peruv. pwd....50c; ¼ lb. Steel filings....12½c; ¼ lb. Gum Arabac....25c; Sal Nitre....25c; 2 oz. Spt. Sal Ammoniac....20c; ¼ lb. Rad. Columbo....31¼c; ½ oz. Pulv. Ipecae....31¼c; 1 oz. Rad. Seneka (Seneca Snake Root)....6¼c; 1 oz. Emet. Tartae....25c; 1 oz. Mercury Dulcis or Calomel....31¼c; 1 oz. Arsenae (Arsenic Trioxide—White Arsenic)....12½c; 2 vials....12½c; ¼ lb. Argentum Nivum (Silver Nitrate)....75c; 2 oz. Sponge....75c; 1 oz. Gum Gamboge....40c; ¼ lb. Rad. Jalapa....50c; Sal Tartar....18 3/4c; 1 nest Pill Boxes....50c.

Rec'd from Pittsburgh by the post Adams, Oct. 30, 1812. 1 lb. Sal. Glaub....25c; 1 oz. Gum Opium....75c; 1 oz. Cantharides....75c. (Asael Adams, Jr. of Warren, Ohio, carried the United States mail on horseback from Pittsburgh to Cleveland during the years 1812 and 1813. Often while riding one horse with the mail he would lead another, loaded with merchandise for the pioneers in Ohio).

Bot of Comfort S. Mygatt, Canfield, Ohio, May 3, 1813. 2 dr. Ipecac....2 oz. Cantharides....50c; May 27, 1813. Sundries to the amt. of $1.55.
Bot of Dr. Dawson, July 23, 1813. 1 oz. Mercury Precipitat. Rubr. (Red Mercuric Oxide—Red Precipitate)....37½c; 1 bottle Lemon Acid (Citric Acid)....37½c; 2 oz. Pulv. Calomel of Dr. Mowery....$1.00.

Bot of Speakman, Say & Co., Pittsburgh, Pa., July 23, 1813. 2 lb. Cort. Peruv....$2.00; 1 lb. Flos. Sulphur....23c; 1 lb. Fol. Senna alx. (Alexandrian)....$1.25; 1 lb. Gum Aloes....55c; ¼ lb. Gum Asafoetida....37½c; ¼ lb. Gum Camphor....$1.00; ¼ lb. Gum Opium....$1.50; ½ oz. Ol. Aniseed (Anise)....62½c; 1 bottle Ol. Ricini....$1.25; 2 lb. Sal. Glaub....28c; 1 lb. Spt. Hartshorn (Sal Ammoniac)....37½c; 1 bottle....18c; 1 lb. Spt. Nitre Dulc....60c; 1 bottle....18c; 1 lb. Rad. Dyanthos....55c; ¼ lb. Rad. Gentian....50c; ¼ Rad. Ipecac Hispan. pulv....$1.12½c; ¼ lb. Rad. Jalap, pulv....37½c; ¼ lb. Rad. Phei pulv....37½c; 1 lb. Argentum Nivum....$1.25; ¼ lb. Sac. Saturni....31¼c; ¼ lb. Cantharides....$1.50; ¼ lb. Calomel or Sub Muriate....67c; ¼ lb. Pix Burgundica....25c; ¼ lb. Caryophilus Aromat. (Cloves)....35c; ¼ lb. Rad. Scilla (Squills)....31¼c; 1 bottle Opodeldoc....31¼c; 1 Composition (Wedgewood) Mortar & Pestle....$1.50; 3 doz. Vials....$1.80; 1 gross Corks....33c; ¼ lb. Gum

Kino 37½c; ½ lb. Arsenae alb. (Arsenic Trioxide—White Arsenic) 30c; ¼ lb. Aniseed 20c; ¼ lb. Borax 25c; ¼ lb. Sal Ammonica crude 37½c; ¼ lb. Creta preparata 10c; 1 lb. Cort. Aurantium 37½c; 2 Crown lancets $2.00; ½ lb. Rad. Seneka 30c; ½ lb. Rad. Glycyrrhiza 18 3/4c.

Bot of the Glass work Clerk. 3 jars $1.00, at Bookstore, Pittsburgh, Chapman's Burns $3.25; Thomas' Practice $4.25, of Major Darragh, 1 Iron Mortar & Pestle $1.00, of Henry Wick. 1 Earthen jar 12½c; 1 lb. Crem. Tartar $1.12½; 1 glass jar with cover 50c.

Bot of Comfort S. Mygatt, Canfield, Ohio, Feb. 18, 1814, ½ oz. Castor (Castoreum) 50c; ¼ lb. Sal Nitre 31¼c; ¼ lb. Bae. Juniperi 12½c. Bot of Comfort S. Mygatt, Canfield, Ohio, May 21, 1814. 4 oz. Spt. Nit. fortis (Nitric Acid) 56c; vial 6c; 4 oz. Merc. Precip. Rubrum (Red Precipitate) 75c; Pill boxes 25c; 1 bottle Spt. Terebinth (Spts. Turpentine) $1.00; 4 lb. Hog's lard 50c; 2 lb. Mutton tallow 25c; 1 lb. Hog's fat 12½c.

Bot of W. Clark Dunlap, Feb. 9, 1815. ½ lb. Rad. Dyanthos $1.00.

Bot of Avery & VanZant, Pittsburgh, June 21, 1815. ¼ doz. Ess. Piper Menth 75c; 1 lb. Gum Guaiac 75c; 1 lb. Antimony crude 62½c; ½ lb. Squills 75c; ½ lb. Sal. Nit 25c; 1 bottle Spt. Sal Ammonia 70c; ½ lb. Rubigo Ferri (Ferric Oxide) 16c; ½ lb. Lap. Calamin 25c; 1 lb. Rad. Spigelia (Pinkroot) 60c; 1 lb. Crem. Tartar 60c; ½ lb. Camphor $1.25; 1 lb. Spt. Lavender Comp. and bottle $1.20; ½ lb. Aqua Fortis (Nitric Acid) 75c; 1 lb. Cassia 75c; ¼ lb. Sac. Saturni 28c; ¼ lb. Magnesia 37½c; 2 oz. Sublimate Merc. (Mercuric Chloride-Corrosive Sublimate) 37½c; ½ lb. Muriatic Acid & vial 31¼c; 1 nest pill boxes 37½c; 4 doz. vials $2.40; ½ lb. Castile Soap 18 3/4c; 1 bottle Olive Oil $1.00; ½ lb. Senna 62½c; Box for packing 50c.

From Dr. Spelman's ledger the following fees are noted: Extracting teeth 12½c to 18 3/4c; Bleeding 18 3/4c; Vaccinations 75c to $1.00; Confinements $3.00 (with no additional charge for delivering twins until year 1822, when a $4.00 fee is recorded.) In this horseback and saddlebag day, calls ranged from 25c to $2.00, the fee probably regulated by the riding distance. Typical of such entries in his ledger are the following: "to visit and advise 25c; to medicines and syringing 25c; to visit and dressing burns 50c; to visit, cupping and blister for a child 50c; to visit and dressing a cut $1.50; to nocturnal visit and sundries $1.50; to visit to wife in travail $1.50; to visit in council and medicine $1.50; to visit and operating on abscess in breast $2.00; to operating on a horse $2.00."

Occasionally there are charges at the residence of the physician which are recorded as follows: "To lancing a boil and cooling powders 25c; to putting in a seaton 25c." The usual record, however, is simply for the medicine furnished to the patient or procured for some member of the family and of which the following are typical: "to emetic for self 18 3/4c; to eye water for William 12½c; to escharotics for wife's toe 25c." From his ledger are taken the following: 1 oz. Elix. Paregoric 31¼c; Bitter Mixture 25c; Ung. cerula 12½c; Cantharides and Sweet Oil 25c; 2 portions of Rhei pulvis 25c; Blister plaster 18¾c; ½ oz. pulv. Chincona 12½c; Squills, laudanum and vial 50c; 1 oz. Barks 25c; Drops for ague with vial lent 25c; 2 oz. crude Sal Ammoniac 18¾c; Mouth powders 25c; Cooling physic 18¾c; Bitters and Blue Stone 25c; Purges and worm tea 50c; 1 oz. Ung. Citrinum 25c; 2 oz. Castor Oil 50c; small vial Aqua fortis 12½c; Antibilious pills 12½c; Emetic Fol Cham. and Soda 25c; Strengthening plaster 25c; Bitter mixture for child 25c; Senna, manna & Ung 40c; Vial eye water, vial lent 25c; Spigelia, senna & calomel 50c; Crem. Tartar & Sulphur 37½c; 1 oz. Gum Asophedita 25c; Arsenic 12½c; Arsenic for rats 12½c; 1 oz. Gum aloes 25c; 1½ oz. Gum camphor 25c; 4 oz. Ung. Calamine $1.00; 1 pair Epispastics 25c; (among Dr. Spelman's 'receipts' these are noted as "good applied to the calves of the legs when the extremities are cold and the skin hot and dry.")

Only a small portion of his practice was paid for in cash. Some notes were given but the bulk was paid in barter. The following credits illustrate the prices current during the early days on the Western Reserve. Corn @ 75c per bushel Buckwheat @ 62½c per bu Flax @ 12½c per lb. Wheat @ $1.00 to $1.25 per bu Rye @ 75c per bu Oats @ 25c per bu. Hay @ 33½c per hundred lb Flour @ $2.00 per hundred lbs. Coffee @ 44c per lb Tea @ $2.50 per lb. Salt @ $2.25 per bu Tobacco @ 37¼c per lb Beef @ 3¼c to 6½c per lb Mutton @ 5c per lb Pork @ 5c per lb Mutton tallow @ 12½c per lb Lard @ 7¼c per lb. Butter @ 7c per lb Cheese @ 12¾c per lb Eggs @ 6c per doz Calf rennet @ 25c each Cow @ $20.00; Beef cow @ 15.37½ Beef heifer @ $8.59 Suckling pigs @ 62½c each Wether sheep @ $2.25 each Potatoes @ 37½c to 50c per bu Turnips @ 12½c per bu Apples @ 25c to 50c per bu Barrel of cider @ $1.25 Turkeys @ 50c each Whiskey @ 25c per qt Brandy @ $3.00 per gallon 200 'punkins' @ $2.00 Flannel @ 75c per yd Linsey @ $1.00 per yd Linen @ 31c per yd Muslin @ 37¼c per yd Tow cloth @ 27c per yd Castor (Beaver) hat @ $6.50 pr boots @ $7.00 Writing paper @ 37½c per quire Upper leather @ 62½ per lb Sole leather @ 44c per lb. Bell strap @ 31¼c Lath @ 33c per hundred ft Shingles @ 50c per hundred Cord wood @ $1.00 per cord Iron @ 12½c per lb Lime @ 12½c per bu Brick @ 50c per hundred; Gimlet @ 18¾c Milk crocks @ 10c each Plates @ 10c each ½ gal. Jars @ 25c each Meat vessels @ $1.50 Wash tub

@ $1.25 ....10 gal. Kettle @ $5.00.... Silver watch @ $18.00 ....Pen knife @ 25c .... by vials returned 18¾c .... by medicine returned 25c.... by vials and some medicine returned 37½c ....by dinner and horse feed 25c .... by horse shoeing with new shoes 83½c ....to setting one pair new shoes 75c .... Horse collar $2.00 ....Curry comb 62½c .... by making a bonnet 62½c....by mending boots 25c ....by vamping boots $1.00 .... by hewing timber $1.00 per day ....by scoring timber 50c per day .... by chopping wood 50c per day ....by daubing 50c per day .... by reaping 75c per day .... by breaking flax 50c per day....by carding 8 lbs. wool $1.00....by surveying 2 acres of land 50c ....by killing hogs 75c....by hauling from Pittsburgh $2.35.

The records of Dr. Spelman show that the shilling (12½c) formed the basis of the transactions of the period. Specie, of which there was little on the Reserve, consisted of the following coins; half cent; cent; half dime; dime; quarter; half dollar and dollar. The first bank on the Western Reserve was the Western Reserve Bank, Warren, O. This bank, chartered Feb. 20, 1812, was the fifth banking institution in the State, and was the only one to continue sound and solvent to the end of the state bank organization. Many of the early banks failed or were closed out with heavy loss and their charters provided little or no security for the public. Notes issued to be used as money were often subject to a heavy discount and because of this fact were looked upon with little favor by the early settlers.

Access to Dr. Spelman's records through the courtesy of Dr. John R. Willoughby, Warren, Ohio.

Stephen Griggs Holbrook, M.D.

The subject of this sketch was born in Tolland, Connecticut, May 21, 1798. His father dying, he, though but a lad, with an elder brother, Ralph, resolved to seek their fortunes in what was then the "New Connecticut." Arriving in Windsor they halted, each engaging in teaching district schools, by which employment they were able to provide for the journey of their mother and the remaining family, who arrived in Windsor in the year 1816. Here for some years these two sons filially supported their family by alternate labor of teaching winters and felling forests and doing farm work in summer. Finally, one day, holding out his blistered hands to his brother, Stephen G. announced his solemn purpose (which no doubt had been long secretly maturing) to earn his living in some other way. The practice of medicine was determined upon, and he at once commenced its study with Dr. Brown, of Morgan. Some little time of preliminary study was also spent at Burton academy, in Geauga County. From this time on till his settlement in Kelloggsville, about 1824, he was engaged in study, attending medical lectures, and teaching common schools. He also studied for a time with Dr. Allen, of Trumbull County, and Dr. O. K. Hawley, of this county (Ashtabula) who as president of the medical society signed his diploma and license to practice medicine and surgery, which was given May 21, 1825—his twenty-seventh birthday.

Upon his arrival in Kelloggsville he boarded in the family of Martin Kellogg, with whose only daughter, Charlotte, he formed an acquaintance which ripened into an attachment and subsequent marriage. In this connection it is but just to bear testimony to the many virtues and excellences of this noble woman. In every high sense she was his help-meet, visiting with him the sick in the neighborhood, and ministering to the needy and afflicted as only a woman can do. In the home she was affectionate and considerate wife, a wise and judicious mother. With one accord they together labored wisely and well in laying the foundations of their prosperity and happiness, which united labor was sadly and abruptly terminated by her decease in 1840. Though now nearly two score years have elapsed since she passed away, her memory lingers like a fragrance in the community that she adorned and especially in the hearts of her children, now grown to maturity. Of this union are now living two daughters and one son, Rev. Martin Kellogg Holbrook, a minister in the far west. Of a subsequent marriage, one son and one daughter were born, Stephen A. Holbrook, and Flora, the wife of S. L. Fobes, both of Geneva, Ohio.

For his professional brethren, with whom he counseled in difficult cases, he cherished great respect and affection. On his death-bed, fully aware of his approaching dissolution, to his attending physician, Dr. Hubbard, he exclaimed, "Coleman is gone, and Spencer and Fifield and Farrington,—all are gone—and why should I stay longer?" Then affectionately embracing, and charging him with a message of love to "A.F.," his brother, he bade him a long adieu; and so, after fifty years of a professional career in Kelloggsville and vicinity, his well-rounded and useful earthly life closed at the ripe age of 77.

The first disciple of Esculapius who graced Harpersfield Township, Ashtabula County, by his presence was Nathan B. Johnson, who emigrated from the land of "wooden nutmegs" (Connecticut) in the year 1808. Dr. Johnson was, it is said, an excellent physician, of a constitution well adapted to endure the hardships incident to a pioneer practice. He was a public benefactor, devoting his life to the profession. He died June 6, 1832. Dr. Hotchkiss was another of the pioneer medical staff of Harpersfield, though both he and Dr. Johnson resided within what is now the township of Geneva.

ANNUAL REPORT OF THE COMMITTEE ON PUBLIC RELATIONS AND ECONOMICS

NO DOUBT many members are familiar with the work of the Committee on Public Relations and Economics during the past year as the important activities of the committee have been reported in the minutes of The Council or referred to in special articles published in *The Ohio State Medical Journal.*

However, a resumé at this time will serve to emphasize the seriousness of some of the questions confronting the medical profession and reveal the necessity for vigorous organized effort during ensuing months.

The committee wishes to thank publicly members of its sub-committees, local legislative committeemen, and officers of component societies for the assistance they have given the committee. Active cooperation on the part of so many key men and individual members has been gratifying and indispensable to the committee.

Officers and committeemen of component societies should feel free to consult with the Committee on Public Relations and Economics. Occasionally, clarification of policies established by the State Association is needed. Information in the files of the committee and its advice may prove helpful to component societies in considering local questions.

Medical Program for Dependent Children—Last Summer and Fall, the Committee on Public Relations and Economics held several important conferences with officials of the State Division of Public Assistance for the purpose of advising that department on policies and plans concerning the formation of a medical and health program in each county for mothers and children receiving financial aid under provisions of the Federal Social Security Act and enabling state laws. (August, 1937, issue, *The Journal*, pages 899-900). Following that series of conferences, certain agreements with respect to general policies and procedures were reached. These subsequently were approved by The Council and by the Division.

Some of the points agreed upon which have served as a basis for negotiations between the medical profession and A.D.C. administrators in each county are as follows:

1. The regulations governing the medical and health program should be elastic so that county programs can be adjusted to meet local needs and conditions, harmonize with local facilities, and comply so far as possible with the views and desires of local physicians. Considerable discretion should be left to local administrators and local physicians.

2. A professional advisory committee should be established in each county, with the medical society represented, to assist and advise the local administrative agency.

3. All qualified doctors of medicine should have a right to participate and recipients of medical services should have free choice of physician.

4. No state fee schedule should be established. Fees, as well as other administrative procedures, should be worked out in each county through conferences of local A.D.C. administrators and representatives of the county medical society.

5. Efforts should be made to avoid red tape and excessive paper work for physicians participating in the program.

Last Fall, a technical brochure known as "Health Standards for Dependent Children" was issued by the State Division. It was the result of cooperative efforts of that department, the State Department of Health, and this committee. Suggestions and recommendations relative to medical and health procedures and administrative details were made for the guidance of county administrators and county medical societies. (January, 1938, issue, *The Journal*, pages 95-97).

If additional conferences are found necessary, the committee will meet with officials of the Division of Public Assistance. However, we believe that this program has developed to a stage where its operation depends largely on agreements and understandings which can be arrived at in the respective counties. This committee from the beginning has insisted that each county medical society should be consulted and be given some responsibility in actual operation of the county program. Also, the committee has recommended that local conditions and desires should be determining factors as to the type and scope of program established in each county. Officials of the Division of Public Assistance have requested its representatives to confer with county medical societies and receive the advice of the medical profession. Important suggestions offered by this committee have been approved by the division. The committee believes that each county medical society should do what it can to guide and direct the A.D.C. medical program in that county. Misunderstandings and mistakes will be minimized if medical organization takes a practical viewpoint by accepting this responsibility.

Farm Security Administration Medical Program—Following several meetings with representatives of the Federal Farm Security Administration (formerly the Rural Resettlement Administration), the Committee on Public Relations and Economics formulated a statement of policy and procedure to serve as a basis for negotia-

tions between county medical societies and officials of that agency on the matter of establishing programs to provide clients of the administration with medical care. (August, 1937, issue, *The Journal*, pages 898-899).

The recommendations of the committee, subsequently accepted and approved by the F.S.A., and The Council of the State Medical Association, are elastic and designed to permit adaptation to local conditions. In other words, the program in each county is to be based on joint agreements between the F.S.A. and the county medical society. This includes questions of fees, procedure, etc. The principle of free choice of physician is one of the fundamental points of the policy officially approved.

In the final analysis, the decision as to whether it shall or shall not assist the Farm Security Administration in setting up a medical program for its clients and participate in such a program rests with each county medical society. What this committee has done is to work out an understanding with the F.S.A. representatives relative to basic principles which may serve as the basis for local conferences. We believe that this is another question which must be handled diplomatically and in a practical manner. Doubtless, results will be more satisfactory if medical organization in each county assumes leadership and supervision. These are possible under the agreements approved by the Farm Security Administration and The Council of the State Medical Association.

Government Control—Those who favor extending the supervision and control of the Federal Government over the practice of medicine through various bureaucratic schemes financed by taxation or through compulsory contributions of one sort or another have been active during the past year. Proposals ranging from those to establish a nation-wide system of state medicine or health insurance to those to expand the scope of the Social Security Act have been presented to the Congress and the National Administration.

No one is qualified to predict what the outcome will be. The medical profession must be prepared to show the public why any scheme of federalized, bureaucratic, government-controlled medical service for all citizens regardless of their financial status would be detrimental to the best interests of the people. Assuming that government does have an obligation to provide medical care for those who are unable to pay for it and other necessities, medical organization should insist that this should be the responsibility of local government in cooperation with county medical societies, assisted financially, if necessary, by the state government. Under local programs of medical care of the indigent, the medical profession can exercise control and supervision, procedure which will minimize inefficiency and waste can be established, and better medical care provided, than under any Federal or state program.

In line with the thought that medical organization should be constructive in opposing unnecessary and objectionable medical service schemes was the statement of policy officially adopted by The Council on November 21, 1937, in answer to a declaration of principles and proposals disseminated by the so-called "Committee of Physicians". (December, 1937, issue, *The Journal*, page 1338.) The Committee on Public Relations and Economics assisted in the formation of that statement which is a most constructive declaration on the general question of socialized medicine and contains many vital points which can be used to advantage by physicians in discussions before lay groups.

There is reason to believe that demands for national, as well as state, schemes to provide medical care for the indigent and low-income groups will diminish if the medical profession will take an active part in directing local programs which have been established to assist many belonging to those groups and will use its initiative and enterprise in evolving new local programs under the direct control of the medical profession and founded on sound medical and economic principles.

Incidentally, this committee has distributed much data on this question to individual members, county societies and lay groups. It has assisted the American Medical Association in assembling pertinent information on conditions in Ohio and is planning to cooperate with the A.M.A. in its nation-wide survey of medical needs and facilities. County medical societies will be asked to help in this undertaking and the success of the project will depend largely on the degree of active interest manifested by local societies.

Group Health Association, Inc.—A medical service scheme, sponsored and financed by the Federal Home Loan Bank Board and Home Owners' Loan Corporation and in operation in Washington, D. C., has been carefully analyzed by the committee. This scheme was denounced in a statement presented to The Council on February 6, 1938, and adopted by The Council. (March, 1938, issue, *The Journal*, pages 322-323). Because the plan is designed to permit participation on the part of all employes of the Federal Government residing in Washington and with slight modifications could be extended to cover Federal employes in all parts of the country, a firm policy of opposition by the medical profession generally is essential. Ohio members of the Congress have been supplied with copies of The Council's statement. It is suggested that physicians follow up this official expression of opposition by writing to their Congressmen and Ohio's Senators or by discussing it with them at the first opportunity.

Poor Relief—The Sub-Committee on Poor Relief is planning a series of meetings this Summer for the purpose of drafting recommendations for overhauling sections of the poor relief statutes governing medical care of the indigent. Conferences will be held with other interested agencies. Suggestions from individual physicians and all county medical societies will be sought. An effort will be made to assemble definite, constructive propositions which can be submitted to the State Legislature as a basis for general revision of the relief statutes. The plans and scope of the work which the committee has laid out for itself were reviewed in a preliminary report published in the November, 1937, issue, *The Journal*, pages 1247-1252, and should be read by every member.

Although the emergency relief legislation which has been enacted from time to time by the State Legislature has provided that state funds allocated for relief may be used to reimburse physicians for services to those on relief, the present situation is far from satisfactory. Undoubtedly at the next regular session of the General Assembly in 1939 efforts will be made to recodify and revamp the relief laws to give Ohio modern and workable relief machinery under the control of local relief agencies. As a result of the studies which will be made during ensuing months by the Sub-Committee on Poor Relief, the State Medical Association hopes to be able to present constructive recommendations on medical aspects of relief which can be considered by the General Assembly. The present haphazard emergency relief program must eventually be abandoned in favor of an adequate permanent program. Also, responsibilities and administrative authority ultimately must be returned to local officials in order to eliminate many of the objectionable features now present.

Legislation and Politics—A review of developments during the regular session of the General Assembly early in 1937 was published in connection with the 1937 annual report of the Committee on Public Relations and Economics. Supplementary material was published in *The Journal* from time to time. Since the adjournment of the regular legislative session, two special sessions have been held. These have been followed by the committee. Suggestions were offered relative to the provisions for medical relief in the emergency relief proposals and our recommendations were incorporated in those proposals as enacted. Also, the committee assisted the State Medical Board and the State Department of Health in obtaining additional funds for necessary activities. Otherwise, the committee took no active part in the legislative controversy over appropriations and taxes, except to express opposition to the enactment of any proposal which would provide for professional or occupational taxes, discriminating against physicians.

Since this is a General Election year, physicians as individuals and as a group must be prepared to take an active part in the approaching political campaigns. It is especially important that the medical profession assist in the nomination and election of competent candidates for the State Legislature. The profession has a right to know how candidates stand on medical and public health questions. Those who are unfriendly to public health administration and scientific medicine should be opposed by the medical profession. Bulletins on this vital question will be disseminated from time to time between now and November to the component societies all of which should be prepared to take an active interest in their local campaigns. Incidentally, the legislative committeeman (or committee) of each society will have to be especially alert during the summer months. He should be prepared to provide all members of the society with accurate information relative to the qualifications of candidates, based on personal interviews, if necessary. Between now and the General Election in November is the crucial time. It will be too late to mend fences after hostile and unqualified candidates are elected to seats in the General Assembly.

Workmen's Compensation—Although no emergency matters in connection with workmen's compensation have arisen, several conferences with officials of the State Industrial Commission have been held during the past year. The Sub-Committee on Workmen's Compensation met recently with representatives of the Commission to discuss a number of changes in administrative procedure on medical questions. The advice of the Committee on Public Relations and Economics on problems involved in administering the law making silicosis a compensable occupational disease and establishing a board of silicosis referees was sought by the Commission and recommendations submitted by the committee. These contacts have been beneficial to the Commission as well as the medical profession and will be continued.

Miscellaneous Activities—Many additional questions of importance were considered by the committee during the past year and appropriate action taken. Among them were:

Investigation of reports that nurses, technicians, etc., employed by some industrial plants and mercantile establishments are engaged in the unlawful practice of medicine and adoption of a statement of policy on this question, which subsequently was officially adopted by The Council. (January, 1938, issue, *The Journal*, page 69).

Recommendation that county medical societies establish cooperative relations with Parent-Teacher groups for mutual assistance on medical and public health matters, especially with respect to school health programs, which recommenda-

tion was approved and adopted by The Council. (March, 1938, issue, *The Journal*, page 322).

Consideration of proposed legislation to provide that all applicants for marriage license must submit to a pre-nuptial medical examination. This question still is under advisement. Conferences with sponsors of the proposal have been held and additional meetings are anticipated.

Contacts maintained with officials of the Division of Public Assistance in direct charge of medical aspects of blind relief and care of crippled children.

Conferences with officials of the State Department of Health, especially heads of the Bureau of Child Hygiene, which is directing the maternal and child health activities of the Social Security Program in Ohio, and of the Bureau of Venereal Diseases, which is heading up the syphilis control program in this state.

Friendly contacts have been maintained with other professional and scientific organizations and with lay groups interested in medical and public health matters. Efforts to have such groups look to medical organization for advice and guidance on many questions have on the whole been successful.

As stated before, the Headquarters Office, Columbus, has furnished much informative material on a variety of questions to members of the Association, other organizations and members of the laity and has cited official policies of the State Association on many subjects for the information of such groups and individuals.

In its work the Committee on Public Relations has endeavored to be constructive. It has tried to be helpful to individual members of the medical profession and component societies, other organizations interested in medical and health questions, and members of the laity seeking accurate information and enlightenment on medical questions, especially economic and social aspects of medical practice and medical care. A progressive, constructive attitude on the part of the medical profession is essential at any time, especially in times of uncertainty and confusion. This is the policy which your committee believes should be followed during the coming year.

CHAS. W. STONE, M.D., *Cleveland, Chmn.*
L. HOWARD SCHRIVER, M.D., *Cincinnati,*
DONALD B. LOWE, M.D., *Akron,*
D. C. HOUSER, M.D., *Urbana,*
H. M. PLATTER, M.D., *Columbus,*
JOHN B. ALCORN, M.D., *Columbus, ex-officio,*
BARNEY J. HEIN, M.D., *Toledo, ex-officio,*
E. M. HUSTON, M.D., *Dayton, ex-officio.*

Only six per cent of the present freshman classes in medical colleges of the United States had less than three years of premedical college work and those holding a degree represent nearly 60 per cent.

Relief Administration Becomes Local Function as Legislature Quits

The second special session of the Ninety-Second Ohio General Assembly which convened last November 29 to enact poor relief legislation and supplemental appropriations for state departments and institutions, came to an end March 3.

Most important legislation passed during the session was the poor relief financing program, which enabled most counties and municipalities to clear up 1937 relief deficits and provide funds for their immediate 1938 relief requirements. The program provided for approximately $11,000,000 of state funds for 1938 and nearly $6,400,000 for deficits and debts incurred during 1937. (see *The Ohio State Medical Journal*, February, 1938, issue, page 203).

Following veto by Governor Davey of House Bills 739 and 740 establishing a state relief director and setting up definite state-wide regulations for the administration of poor relief, (*The Ohio State Medical Journal*, March, 1938, issue, page 330) two bills, House Bills 825 and 826, were introduced providing for a similar setup, but with the provisions objectionable to the Governor eliminated, but House rejected both bills.

Administration of poor relief is now entirely a local function. There is no state relief director nor a state relief commission. State funds will be disbursed to the various political subdivisions by the Treasurer of State, following a pre-audit by the Auditor of State. Provisions for medical care and hospitalization will be at the discretion of local authorities. Fifteen counties in the state are administering relief on a county-wide basis, either through county commissioners or by a central relief agency which they have established. The legality of such an arrangement has been questioned, and is now being considered by the Attorney-General.

Legislation rejected by the General Assembly included an appropriation of $1,500,000 to establish mental clinics and outpatient hospitals for persons afflicted by mental diseases.

During the closing hours of the session, several bills were passed making supplemental appropriations of $3,027,800 for various state departments, including $30,000 for equipment for the Outpatient Department of the Ohio State University College of Medicine.

Open Offices

Physicians who have recently opened offices in Ohio include the following: Dr. George Flenner, Hamilton; Dr. Charles Bogue, Warren; Dr. Carter L. Pitcher, Portsmouth; Dr. L. C. Cosgrove, Jr., Swanton; Dr. J. P. Fairchild, Freeport; Dr. Berta Wechsler, Columbus; Dr. Ervin B. Wallace, Columbus.

ANNUAL REPORT OF THE COMMITTEE ON EDUCATION

THE Committee on Education was authorized by the revised Constitution adopted at the Cleveland meeting in the Fall of 1936. Because the next Annual Meeting was held in the following Spring, last year's report reflected little progress except in organization. The work of the committee was subdivided between four sub-committees: (1) Speakers Bureau; (2) Regional Postgraduate Lectures; (3) District Meetings; (4) Public Health Education. During the past year each of these sub-committees has pushed forward. Their accomplishments will be summarized and together they constitute the report of the entire committee.

DISTRICT MEETINGS

Wm. Kelley Hale, Wilmington, chairman; Paul J. Fuzy, Youngstown; G. A. Woodhouse, Pleasant Hill; J. L. Webb, Nelsonville; and C. E. Hufford, Toledo.

The duty of securing information about district meetings, especially as to the types of program which have proved most effectual, the most desirable physical setup, the most suitable times for meetings, and the social features which aid in keeping up a spirit of friendship among the members of the district is assigned to this sub-committee. The members of the sub-committee have attended many of the district meetings and have corresponded with district society officers to secure and exchange ideas. It is now preparing a report embodying suggestions it hopes will be helpful. When completed, this report will be available to district officers.

SPEAKERS BUREAU

Russel G. Means, Columbus, chairman; H. C. King, Lakewood; H. H. Minor, Steubenville; Wm. M. Singleton, Portsmouth; and Karl D. Figley, Toledo.

Upon appointment this sub-committee secured a list of speakers who signified their willingness to appear before component societies to talk on medical and scientific subjects and indicated the subjects which they were prepared to discuss.

The list, containing about 300 names, was cross-indexed according to subjects and to the locations of the speakers. The state was divided into seven zones into which the speakers were grouped. These zone lists were printed and are furnished to county secretaries upon request. In selecting speakers, it is expected that the local officers will select those not too far away. When a county society is able to do so, it is expected to defray the traveling expenses of visiting lecturers, but, when unable to, expenses will be paid by the Ohio State Medical Association.

The Bureau has been utilized even more than was anticipated when it started work. During the year it has supplied information to about 25 societies. In addition, its lists have been extremely useful to the Sub-Committee on Regional Postgraduate Lectures.

It is not part of the present program of the committee to furnish lecturers to lay groups, although its activities may be expanded to include this function.

The lists prepared are not permanent. It is the intention of the committee to revise them from time to time, so that those now listed will receive requests for new topics which they would be prepared to discuss and names can be added.

When a speaker makes an especially favorable impression on a group, either because of subject matter or method of delivery, the local secretary should inform the sub-committee so that it may have complete data on all speakers.

PUBLIC HEALTH EDUCATION

Carl A. Wilzbach, Cincinnati, chairman; V. C. Rowland, Cleveland; C. I. Stephen, Ansonia; E. H. Porter, Tiffin; James A. Doull, Cleveland; F. L. Shively, Dayton; and Edward D. King, Cincinnati.

This sub-committee has considered means whereby the instruction of the public and the profession in health matters can be furthered.

It has endorsed the showing, by the State Department of Health, of the films, "For All Our Sakes" and "Science and Modern Medicine", before lay groups as part of the campaign against syphilis, and has urged county medical society officers to cooperate with public officials in promoting the showing of the films in their communities whenever possible and to arrange for showing before medical societies of the film "Syphilis", produced jointly by the U. S. Public Health Service and the American Medical Association, and which can be secured from the State Department of Health without cost. It has recommended that the State Medical Association take an active part in promoting public health education by means of the radio by urging local county medical societies in counties with radio broadcasting facilities to interview the officials of the stations on the possibilities of having them carry the regular weekly broadcasts of the American Medical Association.

The committee has endorsed and sponsored an educational program on deafness prevention and amelioration, scope and purposes of the program to be as follows:

a. Acquainting physicians and the public with the problems of impaired hearing.

b. Encouraging the formation of committees on deafness prevention and amelioration in local medical societies.

c. Promoting periodic hearing tests by modern,

scientific methods as a part of the medical examination of school children.

d. Advising: The conservation of residual hearing under medical guidance; the early study of lip reading; the use of a hearing aid as indicated by otological examination.

e. Protecting the hard of hearing from the imposition of fraudulent cures and devices.

f. Cooperating with local and national agencies engaged in improving the condition of the hard of hearing.

g. Urging the avoidance of wrong methods of swimming and diving.

Activities of local committees would be to call these points to the attention of local boards of education and local public health departments and head up local programs. The committee plans to interview state school officials and state public health officials, urging cooperation in an educational campaign of this character. Later, the committee, with the assistance of qualified otologists, will prepare special articles on phases of this subject, for publication in *The Ohio State Medical Journal*, dissemination to county medical societies, and possibly newspaper releases.

The Sub-Committee on Public Health Education has urged more active cooperation between medical organization and parent-teacher groups on medical and public health questions. The subcommittee believes it would be advisable to further the education of the public in regard to the control of cancer and is cooperating with the American Society for the Control of Cancer in formation of an Ohio Women's Field Army Against Cancer. Dr. Carl A. Wilzbach, chairman of this sub-committee, Dr. Harry S. Noble, St. Marys, member of the Committee on Education, and Dr. Lawrence A. Pomeroy, Cleveland, are members of the Executive Committee of this new organization.

The foregoing recommendations of the subcommittee have the approval of The Council of our Association.

REGIONAL POSTGRADUATE LECTURES

Clyde L. Cummer, Cleveland, chairman; Harry S. Noble, St. Marys; James M. Pierce, Cincinnati; Cecil Striker, Cincinnati; S. H. Ashmun, Dayton; Louis N. Jentgen, Columbus; and Robert T. Allison, Jr., Akron.

In its 1937 report, the Committee on Education submitted a general outline of the plans formulated by the Sub-Committee on Regional Postgraduate Lectures for holding postgraduate and refresher courses in various parts of the state.

Briefly the scheme for these postgraduate lectures is built on a five-year basis. As started the plan calls for eight sessions annually at each regional center, with two lectures at each session. The full five-year course, therefore, would comprise 80 lectures. The committee attempted to distribute these lectures between the specialties or fields of medicine in proportion to their relative importance and also to select timely subjects so that the course will furnish a review of progress in medicine, surgery, and the specialties of especial interest to men doing general practice. For example, the first-year course in each region covers the following subjects: arteriosclerosis, diagnosis and treatment of early syphilis, pneumonia, diabetes, intestinal obstruction, lesions of the cervix, tuberculosis in infancy, treatment of common contagious diseases, common psychoses, cancer of the breast, prenatal and postnatal care, infections of the urinary tract, angina pectoris, fungous and pyogenic infections of the skin, medical and surgical aspects of arthritis.

Survey of Local Programs—Careful surveys of membership density and educational programs being given by local and district medical societies were made. It was found that in Cleveland a series of postgraduate lectures is conducted each year by the Cleveland Academy of Medicine. Western Reserve University also conducts a clinical week for its alumni to which the medical profession is welcome. In Youngstown, the Mahoning County Medical Society has held yearly a most successful postgraduate day. This is well-planned and attracts many members from surrounding counties. An annual postgraduate day is held annually at Toledo, sponsored jointly by Toledo University and the Toledo Academy of Medicine and other postgraduate programs are given by the academy itself. In Columbus, the College of Medicine, Ohio State University has been holding annually a postcollegiate clinical program of several days duration which is largely attended and has been quite successful. The College of Medicine, University of Cincinnati, provides postgraduate work for physicians of that part of the state and the Cincinnati Academy has exceptionally good programs in this field. Similar activities are carried on in Akron, Canton and Dayton and some of the other cities of the state, under the sponsorship of active medical societies.

Six Regions Proposed—Therefore, the committee concluded that its efforts should be concentrated upon the less thickly populated counties where postgraduate facilities are not so readily available to practicing physicians. Accordingly six regional centers were selected. As time goes on and experience accumulates, this number may be reduced or increased. No region will be continued or a new one added unless there appears to be a definite need and demand for postgraduate courses. For purposes of organization, the following regional centers were tentatively selected: Region A, Northwestern Ohio, Findlay-Defiance; Region B, South-Central Ohio, Chillicothe; Region C, North-Central Ohio, Mansfield; Region D, Southeastern Ohio, Zanesville or New

Concord; Region E, Southwestern Ohio, Springfield or Dayton; Region F, Northeastern Ohio, Canton or Massillon.

Sessions Held to Date—The first series of lectures was started in Northwestern Ohio. Sessions were held alternately at Findlay and Defiance, starting October 21, 1937, and ending February 3, 1938. The attendance varied from a low of 79 to a peak of 190 with an average of 122. In all, 331 different men attended one or more lectures, so that this series may have been said to have reached this number of our members.

The second region to get under way was South-Central Ohio, in which lectures have been given at Chillicothe. The first session was held on February 3 and was attended by 168 physicians. At the second session on February 17 registration totaled 178 and at the third on March 3, 136. Sessions in Region B will conclude on May 19.

It is the hope of the committee to get lectures started in a third region at an early date.

Progress Analyzed—While this accomplishment is a small part of the program which the committee has laid out, merely a beginning, it is difficult to proceed rapidly in a project of this sort, which requires careful local arrangements, attention to much detail, and the securing of 16 speakers for each region's course. The series were planned to be identical in each region, although experience has shown the necessity for making certain changes. So far the lectures have been didactic and it has not been possible to introduce patients as clinical material, although we feel that this would be ideal. We have found that the type of lecturer who "goes over" best is the one so accustomed to public speaking that he can give his talk fluently and forcefully without reading a manuscript, referring to notes only occasionally; who knows his subject so thoroughly that it is obvious that he speaks from personal experience; who refers to cases he has seen and so gives in effect a "dry" clinic; and who avoids too much use of the lantern, whereby he might lose control of his audience. The audience wants to feel that it is listening to the authority in person, not to one who is forced to buttress his talk by frequent quotations from authorities.

Speakers who have appeared have been gracious and have responded generously, going to distant parts of the state at the expense of time and physical fatigue, with no remuneration. The Association is deeply grateful to them.

Also, the Association is deeply indebted to Dr. B. F. Mowry of Findlay, and Dr. D. J. Slosser of Defiance, co-chairmen for the Northwestern Region; to Dr. A. E. Merkle of Chillicothe, chairman for the South-Central Region; and to the members of the local committees which served with them. These local committees were made up of representatives appointed from the component societies in the counties in each region. Without their active support and cooperation, especially in making arrangements for the places of meetings, success would not have been achieved.

The cost of this venture as it has been started should be considered. The course in Northwestern Ohio, comprising 16 lectures, was given at a cost of approximately $500, including printing, postage, publicity, rental of halls, traveling expenses of lecturers but no honorariums for lecturers since all of them rendered their services gratuitously. Whether this can be taken as a guide for the future we cannot say but it will give an approximate idea.

The Committee on Education and the Sub-Committee on Regional Postgraduate Lectures have received the utmost cooperation from the Headquarters Office staff. Without the services of the personnel of our Headquarters Office in the field and in the Headquarters Office, we could not have started or followed through, and we feel that the entire membership should be grateful to them for having ably and willingly supported our efforts to make this one of the most progressive activities ever undertaken by the State Medical Association.

As stated previously, this program still is in the experimental stage. The committees in charge welcome advice and suggestions from the membership—in fact must have them in order to make the program of even greater benefit. Members who have views relative to the basic outline of this program or who have suggestions as to changes in time and place of lectures, subjects, speakers, etc., should feel free to express themselves to members of the committees.

CAMPAIGNS AGAINST SYPHILIS AND CANCER

The campaigns against syphilis and cancer required the cooperation of all sub-committees.

Syphilis—In regard to syphilis it has been the opinion of the committee that the efforts of this Association should be directed largely toward furthering and arousing interest and enthusiasm of the practicing physicians and assisting them by bringing to them a review of the modern concepts in regard to the recognition and treatment of the infection.

The committee desires to cooperate fully with the educational features of the program of the United States Public Health Service. Accordingly request was made that both district societies and local county societies secure qualified speakers to present various phases of syphilis on their programs. Practically all the district societies have given such programs, in some instances devoting an entire day to the presentation of patients and discussion of modern methods of treatment

and diagnosis as well as a consideration of the social and public health aspects. The program of the first year of the Regional Postgraduate Lectures calls for a talk on the treatment of early syphilis. Furthermore, the members of this committee and others have cooperated by giving lectures before county medical societies and to the public at various places in the state.

Unfortunately, there are practical difficulties which stand in the way of giving instruction at regional and district centers in the actual technique of diagnosis and treatment, principally in securing patients to whom treatment may be given and in organizing clinics where such demonstration treatments may be carried out. At first the committee felt that publicity could be given to the clinics now operating in the large metropolitan centers where demonstration could be made and possibly opportunity afforded for actual practice in giving treatments. However, this need seems to be filled by the recent inauguration of such a course at the Lakeside Hospital, Cleveland, under the auspices of the U. S. Public Health Service, conducted by the staff of the Department of Dermatology and Syphilology headed by Dr. H. N. Cole, Western Reserve University. Here instruction is offered for periods of from three days up to one month. The teaching is well organized and given by competent and experienced instructors provided with ample clinical material.

Cancer—As to the control of cancer, the education of the general public will be furthered by the efforts of the Women's Field Army Against Cancer, when that becomes fully operative. In addition, the Sub-Committee on Regional Postgraduate Lectures has scheduled one lecture on cancer in each annual course given at the regional centers.

CONCLUSION

The committee feels that genuine progress has been made in starting the work of this committee. There is room for improvement and almost unlimited opportunity for its evolution into an efficient organization for carrying on the continuing education of the public and our members. The committee realizes that it is but the instrument of the membership. It must rely on all members of the Association to serve as its observers. After all it is they whom the committee serves and wishes to please. We beg them to let us know what they think of our plans and the way in which they are being carried out. We hope that they will make constructive suggestions.

CLYDE L. CUMMER, M.D., *Cleveland, Chmn.*
CARL A. WILZBACH, M.D., *Cincinnati,*
WM. KELLEY HALE, M.D., *Wilmington,*
HARRY S. NOBLE, M.D., *St. Marys,*
RUSSEL G. MEANS, M.D., *Columbus.*

Ohio Death Rate 11.2% for 1937; Heart Disease Fatalities Increase

The death rate in Ohio for the year 1937 was 11.2 per 1,000 population, the same as for the year 1936, but there was a slight increase in the number of deaths, 81,560 for 1937 and 80,912 for 1936, according to the records filed in the State Department of Health, Division of Vital Statistics.

An increase in the number of deaths was noted in the following communicable diseases: measles, whooping cough, diphtheria and influenza. Diseases of the heart with 19,182 deaths continued in first place among the increases, recording more than one additional death each day over the year 1936. The automobile also claimed an increased number of persons, the 1937 provisional figures showing 240 more fatal automobile accidents.

Decreases in the number of deaths were recorded in tuberculosis (all forms), cancer (all forms), cerebral hemorrhage, pneumonia, nephritis and diseases peculiar to early infancy.

Tabulated below are the principal causes of death, with rates per 100,000 population in Ohio for 1936 compared with the provisional figures for 1937.

	1936 No.	1937 No.	1936 Rate	1937 Rate
Typhoid fever	117	169	1.63	2.32
Smallpox	1	2	.01	.03
Measles	41	101	.57	1.39
Scarlet fever	158	128	2.20	1.76
Whooping cough	184	288	2.56	3.96
Diphtheria	105	110	1.46	1.51
Influenza	1,352	2,024	18.80	27.81
Acute anterior poliomyelitis	53	55	.74	.76
Lethargic encephalitis	59	60	.82	.82
Epidemic cerebrospinal meningitis	161	116	2.24	1.49
Rabies	3	6	.04	.08
Tuberculosis (all forms)	3,555	3,327	49.45	45.71
Cancer (all forms)	8,543	8,466	118.83	116.32
Diabetes	1,874	1,911	26.07	26.26
Diseases of the nervous system	9,116	8,661	126.80	119.00
Cerebral hemorrhage	7,771	7,260	108.09	99.75
Diseases of the circulatory system	20,629	20,988	286.95	288.38
Diseases of the heart	18,802	19,182	261.54	263.56
Diseases of the respiratory system	6,859	6,655	95.41	91.44
Pneumonia (all forms)	6,013	5,693	83.64	78.22
Diseases of the digestive system	4,883	4,614	67.92	63.40
Diarrhea & enteritis (under 2 yrs.)	564	548	7.84	7.53
Diseases of the genitourinary system	6,822	6,237	94.89	85.70
Nephritis	5,848	5,308	81.34	72.93
The puerperal state	511	490	7.11	6.73
Malformations and diseases peculiar to early infancy	3,105	3,068	44.58	42.46
Suicide	1,026	1,072	14.27	14.73
Homicide	436	367	6.06	5.04
Conflagration	113	57	1.57	.78
Accidental burns (conflagration ex.)	322	304	4.48	4.18
Drowning	237	259	3.29	3.56
Accidental falls	2,022	1,513	28.13	20.79
Railroad accidents	484	388	6.73	5.33
Street car accidents	70	54	.97	.74
Automobile accidents	2,155	2,395	29.97	32.91
All other accidents	1,802	1,640	25.07	22.43
Total accidents	7,205	6,610	100.22	90.72
All other causes	3,803	4,603	52.90	63.25
GRAND TOTAL	80,912	81,560	1,124.47	1,120.53

Objectives of Child Health Day Outlined By Bureau Chief

By DR. ARTHUR W. THOMAS, Chief,
Bureau of Child Hygiene, Ohio Department of Health

MAY 1 has been named and will be proclaimed as National Child Health Day. The slogan which has been adopted for this year is "Speed Children on the Road to Health".

At this time it seems desirable that the attention of our citizens be focused upon the benefit to be derived from consulting their physicians and having their children carefully examined and immunized against preventable diseases, and obtaining instruction as to proper feeding and general care.

It may be stated that the policy of the Bureau of Child Hygiene is to make every effort to educate mothers and fathers in the health of their children and to teach them that much can be done to reduce mortality and morbidity if we only gain acceptance of the knowledge and skill which the medical profession possesses in 1938. The Ohio Department of Health has no desire to participate in the practice of medicine,—that is for the physicians, but we do make a very definite attempt to have people consult their doctors.

We teach that the new infant is not just a casual acquisition to the family, as a new radio might be, but that it has an enormous sentimental and, indeed, economic value. We submit that the very first few days are the most hazardous and that the first months and years are the formative ones during which the foundation is being laid for a sound adult structure. Our position is that during those first months and years the infant is most susceptible to diphtheria and perhaps smallpox and should be immunized before the ninth month. We point out the fact that disease is best attacked while it is still in its early stage. We advocate that the infant should be seen by its physician every two weeks during the first six months, every month for the next six, every three months for the next year and then every six months until adolescence, and that a complete physical examination, including urinalysis and blood-pressure determination (after six years of age) be done at each visit.

This is the doctrine which we preach and which will be publicized throughout Ohio on May 1 through the facilities of the press, radio and platform. Because of this effort it is our hope that a great number of children will be brought to their medical advisors for these services.

My appeal to the members of the Ohio State Medical Association is that they, individually or as members of component societies, give us their aid and support; that they accept invitations to appear before lay audiences and teach prophylactic pediatrics upon these occasions; that they carefully examine each child who may be brought to them for that purpose and that they preach and practice the gospel of early immunization against preventable diseases. Matters of public health belong to those who are trained in the science and art of medicine and we in health offices court the full cooperation of the medical profession and offer ours in return. It is only in this way that our children will enjoy what is rightfully theirs,—sound, rugged bodies with the maximum resistance to disease.

Youngstown Postgraduate Assembly Will Be Held on April 28

Ohio physicians are invited to attend the 11th Annual Postgraduate Day Assembly of the Mahoning County Medical Society, an all-day meeting, Thursday, April 28, at Hotel Ohio, Youngstown. Dr. Frank H. Lahey, Dr. Gilbert Horrax, Dr. Everett D. Kiefer, and Dr. Elmer C. Bartels, of the Lahey Clinic, Boston, will speak. The registration fee of $5 includes luncheon and dinner at the Hotel Ohio. The complete program follows:

9:00 A.M.	"Management of Peptic Ulcer", Dr. Kiefer
10:00 A.M.	"Trigeminal Neuralgia and Meuniere's Disease", Dr. Horrax
11:00 A.M.	"Problems Involved in Weight Reduction", Dr. Bartels
12:00 Noon	Luncheon
2:00 P.M.	"Diagnosis and Management of Thyroid Disease", Dr. Lahey
3:00 P.M.	"Constipation and Functional Indigestion", Dr. Kiefer
4:00 P.M.	"Diagnosis and Treatment of Gout", Dr. Bartels
6:30 P.M.	Banquet
8:00 P.M.	"Diagnosis and Treatment of Brain Tumors", Dr. Horrax
9:00 P.M.	"Diagnosis and Management of Carcinoma of the Colon and Rectum", Dr. Lahey.

304 Registered at O. S. U. Assembly

Three hundred and four physicians, exclusive of guests, registered at the annual Postcollegiate Clinic Assembly of the Ohio State University College of Medicine, held at Columbus, March 3, 4 and 5. The program consisted of approximately 125 short talks and clinical presentations. The following officers of the Medical Division of the Ohio State University Alumni Association were elected at the Alumni Reunion: Dr. Charles T. Atkinson, Middletown, president; Dr. C. F. Brunk, Detroit, Mich., first vice-president; Dr. D. M. McDonald, Akron, second vice-president; Dr. Jonathan Forman, Columbus, secretary, and John B. Fullen, Columbus, executive secretary.

Ninety-Second Annual Meeting

OHIO STATE MEDICAL ASSOCIATION

Neil House, Columbus, Ohio
Wednesday and Thursday,
May 11 and 12, 1938

SUMMARY OF PROGRAM . . .

Wednesday, May 11

9:30 A.M. HOUSE OF DELEGATES.
Main Dining Room, Lobby Floor.
Annual Address of the President and Business Session.

10:30 A.M. FIRST GENERAL SESSION.
Main Ballroom, Mezzanine Floor.
Fred Wise, M.D., New York, N. Y., guest speaker.
Following Ohio physicians representing Scientific Sections: Charles E. Kinney, M.D., Cleveland, Section on Eye, Ear, Nose and Throat; and Clyde L. Cummer, M.D., Cleveland, Section on Medicine.

12:15 P.M. PUBLIC HEALTH ROUND-TABLE LUNCHEON.
Spanish Room, Deshler-Wallick Hotel.
Under auspices of Section on Public Health and Preventive Medicine. Speakers: Mr. Leo F. Ey, Columbus, and Warren C. Breidenbach, M.D., Dayton.

1:15 P.M. FORMAL OPENING OF EXHIBITS.

1:30 P.M. SECOND GENERAL SESSION.
Main Ballroom, Mezzanine Floor.
Drew L. Davies, M.D., Columbus. Special First-Aid Demonstration, with members of State Highway Patrol.

1:45 P.M. Clara M. Davis, M.D., Winnetka, Ill., guest speaker.

2:30 P.M. SESSIONS OF THREE SCIENTIFIC SECTIONS:
SECTION ON MEDICINE.
Main Ballroom, Mezzanine Floor.
SECTION ON OBSTETRICS AND GYNECOLOGY.
Main Dining Room, Lobby Floor.
SECTION ON EYE, EAR, NOSE AND THROAT.
Colonial Room, Mezzanine Floor.

5:30 P.M. INSPECTION OF EXHIBITS.

8:00 P.M. THIRD GENERAL SESSION.
Main Ballroom, Mezzanine Floor.
Perrin H. Long, M.D., Baltimore, Md.; and Irvin Abell, M.D., Louisville, Ky., President-Elect, American Medical Association; guest speakers.

Thursday, May 12

9:00 A.M. SESSIONS OF THREE SCIENTIFIC SECTIONS:

SECTION ON SURGERY.

Main Ballroom, Mezzanine Floor.

SECTION ON PEDIATRICS.

Main Dining Room, Lobby Floor.

SECTION ON NERVOUS AND MENTAL DISEASES.

Colonial Room, Mezzanine Floor.

12:00 Noon. INSPECTION OF EXHIBITS.

12:00 Noon. HOUSE OF DELEGATES LUNCHEON AND FINAL SESSION.

Main Dining Room, Lobby Floor.

1:30 P.M. FOURTH GENERAL SESSION.

Main Ballroom, Mezzanine Floor.

Sumner L. Koch, M.D., Chicago, Ill., and Hugo Roesler, M.D., Philadelphia, Pa., guest speakers.

Following Ohio physicians representing Scientific Sections: H. E. McClenahan, M.D., Youngstown, Section on Obstetrics and Gynecology; Thomas E. Jones, M.D., Cleveland, Section on Surgery; E. A. Baber, M.D., Cincinnati, Section on Nervous and Mental Diseases; John A. Toomey, M.D., Cleveland, Section on Pediatrics.

5:15 P.M. INSPECTION OF EXHIBITS.

7:30 P.M. ANNUAL BANQUET.

Columbus Academy of Medicine, host.

1. Presentation of Past-President's Gavel and Introduction of Incoming President and President-Elect.
2. Address by Guest Speaker.

HOUSE OF DELEGATES . . .

OPENING SESSION

Wednesday Morning, May 11

9:30 o'clock

Meeting Place—Main Dining Room, Lobby Floor.

Presentation of the President of the Ohio State Medical Association by W. B. Morrison, President of The Columbus Academy of Medicine.

In the chair, JOHN B. ALCORN, *President, Ohio State Medical Association.*

1. Call to Order by the President.
2. Roll Call.
3. Consideration of the Minutes of last Annual Meeting. (June, 1937, issue, *The Journal.*)

4. Annual Address of the President.

5. Appointment of Reference Committees by the President:
   (a) Committee on Presidential Address.
   (b) Committee on Resolutions.
   (c) Committee on Annual Reports.
   (d) Committee on Credentials of Delegates.
   (e) Committee on Tellers and Judges of Election.
   (f) Committee on Time and Place of 1939 Annual Meeting.

6. Reports of Standing Committees:
   (Reports submitted by title only as they were published in full in the April, 1938, issue, *The Journal*).
   (a) Public Relations and Economics—C. W. Stone, Cleveland, Chairman.
   (b) Education—C. L. Cummer, Cleveland, Chairman.
   (c) Medical Defense—J. E. Tuckerman, Cleveland, Chairman.
   (d) Auditing and Appropriations—Parke G. Smith, Cincinnati, Chairman.
   James A. Beer, Columbus, Treasurer.

7. Nomination and Election of Committee on Nominations:
   (Nominations from the floor with one representative from each Councilor District. This committee shall report to the second session, Thursday, 1:00 P.M., its recommendations in the form of a ticket, containing nominees for constitutional offices as required under the Constitution and By-Laws).

8. Introduction of Resolutions:
   (Resolutions must be introduced at this session of the House of Delegates, referred to the Reference Committee on Resolutions and reported back to the House at Thursday afternoon session before any action can be taken. All resolutions must be typewritten and submitted in duplicate).

9. Submission of invitations for next Annual Meeting:
   (It is necessary that invitations for the 1939 Annual Meeting be referred to the Reference Committee on Time and Place of Annual Meeting).

10. Miscellaneous business.

11. Recess.

SECOND AND FINAL SESSION

Thursday Noon, May 12

12:00 o'clock

Meeting Place—Main Dining Room, Lobby Floor.

Complimentary Luncheon for Delegates and Officers.

Final Business Session:

1. Roll Call.

2. Consideration of unfinished business from Wednesday's session of the House of Delegates.

3. Reports of Reference Committees:
   (a) Committee on Time and Place of 1939 Annual Meeting.
   (b) Committee on Presidential Address.
   (c) Committee on Annual Reports.
   (d) Committee on Resolutions.

4. Miscellaneous Business.

5. Election of President-Elect. Nominations from the floor.

6. Report of Committee on Nominations:

(a) Election of Members of The Council.

(Members of The Council are elected for two-year terms, terms of those representing odd numbered districts expiring in even numbered years).

To be elected:

Councilor, First District—(Incumbent, Parke G. Smith, Cincinnati.)
Councilor, Third District—(Incumbent, O. P. Klotz, Findlay.)
Councilor, Fifth District—(Incumbent, Harry V. Paryzek, Cleveland.)
Councilor, Seventh District—(Incumbent, C. W. Kirkland, Bellaire.)
Councilor, Ninth District—(Incumbent, I. P. Seiler, Piketon.)

(b) Election of Delegates and Alternates to the American Medical Association.

(Four delegates and their respective alternates for terms of two years)

Those whose terms expire at this time are:

Carl R. Steinke, Akron.
C. C. Sherburne, Columbus. (Alternate.)

Ben R. McClellan, Xenia.
D. W. Hogue, Springfield. (Alternate.)

E. R. Brush, Zanesville.
Gilbert Micklethwaite, Portsmouth. (Alternate.)

Charles W. Stone, Cleveland.
V. N. Marsh, Painesville. (Alternate.)

7. Installation of Officers for 1938-1939.

8. Submission of committee appointments by new President for confirmation by House of Delegates.

9. Unfinished Business.

10. Adjournment.

DELEGATES AND ALTERNATES . . .

Counties	*Delegates*	*Alternates*
ADAMS	R. C. Wenrick	Hazel L. Sproull
ALLEN	J. R. Tillotson	E. H. Hedges
ASHLAND	E. L. Jackson	E. L. Clem
ASHTABULA	R. B. Wynkoop	E. H. Merrell
ATHENS	Wm. Hubert Hyde	E. I. Stanley
AUGLAIZE	Guy E. Noble	R. C. Hunter
BELMONT	R. H. McCommon	L. L. Liggett
BROWN	Geo. P. Tyler, Jr.	R. B. Hannah
BUTLER	Harold O. Lund	F. W. Brosius
CARROLL	W. G. Lyle	P. S. Whiteleather
CHAMPAIGN	D. C. Houser	J. W. Norman
CLARK	G. M. Lane	A. K. Howell
CLERMONT	Jas. K. Ashburn	J. M. Coleman
CLINTON	Robert Conard	Glenn K. Dennis
COLUMBIANA	John A. Fraser	Paul H. Beaver
COSHOCTON	A. P. Magness	J. G. Smailes
CRAWFORD	C. A. Marquart	R. J. Caton
CUYAHOGA	I. H. Einsel	E. A. Marshall
	G. F. Sykes	J. E. Tuckerman
	Claude D. Waltz	Charles E. Kinney
	H. C. King	M. L. Siegel
	C. G. LaRocco	B. B. Larsen
	E. F. Kieger	D. A. Chambers
	R. K. Updegraff, Jr.	George W. Binkley
	Milton B. Cohen	Louis M. Starin
	Harry L. Farmer	F. C. Oldenburg
	Farrell T. Gallagher	R. J. Frackelton
	M. Paul Motto	Geo. H. Lewis
DARKE	C. I. Stephen	J. W. Van Lue
DEFIANCE	D. J. Slosser	John D. Cameron
DELAWARE	James G. Parker	W. E. Borden
ERIE	Ross M. Knoble	A. R. Grierson

Counties	*Delegates*	*Alternates*
FAIRFIELD	Ralph H. Smith	C. H. Hamilton
FAYETTE	James F. Wilson	M. N. Reiff
FRANKLIN	I. B. Harris	George T. Harding
	J. H. J. Upham	J. M. Dunn
	E. J. Emerick	H. E. LeFever
	L. L. Bigelow	John H. Mitchell
	John M. Thomas	John E. Brown, Jr.
FULTON	R. W. Reynolds	Thos. F. Smyth
GALLIA	W. Lewis Brown	S. L. Bossard
GEAUGA		
GREENE	H. C. Messenger	C. G. McPherson
GUERNSEY	George Swan	F. Gordon Lawyer
HAMILTON	Henry B. Freiberg	Wm. J. Topmoeller
	V. Bradley Roberts	Charles D. Heisel
	Emil R. Swepston	George Renner
	Max M. Zinninger	Joseph C. Lindner
	Ralph G. Carothers	John W. McCammon
	Otto J. Seibert	Daniel C. Rivers
	E. O. Swartz	Irving H. Schroth
HANCOCK	J. V. Hartman	J. M. Firmin
HARDIN	R. G. Schutte	John A. Mooney
HARRISON	E. L. Miller	James A. L. Toland
HENRY	J. J. Harrison	T. P. Delventhal
HIGHLAND	H. W. Chaney	
HOCKING	Allen A. Cole	C. T. Grattidge
HOLMES	Neven P. Stauffer	J. C. Elder
HURON	Geo. F. Linn	O. J. Nicholson
JACKSON	J. S. Hunter	J. J. McClung
JEFFERSON		
KNOX	F. C. Anderson	Julius Shamansky
LAKE	V. N. Marsh	F. J. Dineen
LAWRENCE	Ralph F. Massie	George G. Hunter
LICKING	J. Fleek Miller	W. E. Shrontz
LOGAN	C. K. Startzman	M. L. Pratt
LORAIN	S. V. Burley	John T. Fawcett
	Chas. R. Meek	E. J. Heinig
LUCAS	A. A. Brindley	R. C. Young
	E. B. Gillette	A. P. Hancuff
	J. F. Wright	E. G. Galbraith
MADISON	W. A. Holman	R. S. Postle
MAHONING	Walter K. Stewart	Dean A. Nesbit
	O. J. Walker	Edward J. Reilly
	Gordon G. Nelson	Ivan C. Smith
MARION	H. K. Mouser	B. D. Osborn
MEDINA	Morris Wilderom	Henry G. Lehrer
MEIGS	P. A. Jividen	Bryon Bing
MERCER	M. L. Downing	G. I. Scheetz
MIAMI	G. A. Woodhouse	H. W. Kendell
MONROE		
MONTGOMERY	H. V. Dutrow	E. M. Smith
	A. W. Carley	M. R. Haley
	P. L. Yordy	G. C. Grout
	C. J. Derby	
MORGAN	Edgar Northrup	E. G. Rex
MORROW	F. M. Hartsook	Lowell Murphy
MUSKINGUM	M. A. Loebell	C. F. Sisk
NOBLE		
OTTAWA	A. S. Mack	C. R. Wood
PAULDING	L. R. Fast	Ray H. Mouser
PERRY	H. F. Minshull	James Miller
PICKAWAY	C. G. Stewart	Edwin Shane
PIKE	L. E. Wills	R. M. Andre
PORTAGE	J. S. Deyell	J. M. Painter
PREBLE		
PUTNAM	W. D. Hickey	B. E. Watterson
RICHLAND	John S. Hattery	Frank Maxwell
ROSS	O. P. Tatman	R. L. Counts
SANDUSKY	C. I. Kuntz	J. C. Boyce
SCIOTO	Dow Allard	J. P. McAfee

Counties	*Delegates*	*Alternates*
SENECA	R. R. Hendershott	E. H. Porter
SHELBY	L. C. Pepper	J. W. Tirey
STARK	J. P. DeWitt	V. Z. Garster
	A. R. Basinger	W. C. Manchester
	G. F. Zinninger	Albert Wild
SUMMIT	C. R. Steinke	F. C. Potter
	W. A. Hoyt	F. B. Roberts
	D. C. Brennan	H. H. Musser
	D. B. Lowe	E. A. Freeman
TRUMBULL	R. D. Herlinger	J. D. Knox
TUSCARAWAS	M. W. Everhard	J. W. Calhoon
UNION	John Dean Boylan	Harry G. Southard
VAN WERT	J. R. Jarvis	F. C. Duckwall
VINTON	H. D. Chamberlain	B. F. Wills
WARREN	N. A. Hamilton	
WASHINGTON	R. W. Riggs	C. C. Deamude
WAYNE	R. C. Paul	L. G. Strauss
WILLIAMS	H. W. Wertz	H. R. Mayberry
WOOD	Earl D. Foltz	Paul F. Orr
WYANDOT		

The officers and members of The Council of the State Association also are members of the House of Delegates.

GENERAL SESSIONS . . .

FIRST GENERAL SESSION

Wednesday Morning, May 11

10:30 o'clock

Meeting Place—Main Ballroom, Mezzanine Floor.

CLAUDE B. NORRIS, *Youngstown,* Member, Committee on Scientific Work, presiding.

10:30 to 11:00

THE HEARING PROBLEM: A CHALLENGE TO MEDICINE

CHARLES E. KINNEY, *Cleveland,*

Representative of the Section on Eye, Ear, Nose and Throat.

Partial or complete deafness is a medical problem. In many instances it can be prevented and ameliorated. Rehabilitation is only a small part of the problem. Medicine has attacked the problem indirectly through reduction in incidence of communicable diseases, special work of individual physicians, and through efforts to standardize audiometers. Activities of government and lay groups reviewed as well as activities in the schools. An Ohio program recommended.

11:00 to 11:30

WHAT PART SHOULD THE PRACTICING PHYSICIAN PLAY IN THE CAMPAIGN AGAINST SYPHILIS?

CLYDE L. CUMMER, *Cleveland,*

Representative from the Section on Medicine.

Syphilis is one of the most important communicable diseases. There is need for active medical leadership in the campaign against it as a public health menace. Publicity and education of the public are prime requirements. The cooperation of many agencies is necessary. The part doctors play will depend on them. The task is not one for specialists alone but for all practicing physicians. To do our part in this campaign, we must all be prepared to recognize more cases, especially in the early contagious stage and in

pregnant women. It is essential that we realize keenly the necessity for treatment and make an effort to administer it efficiently according to modern standards, continuing it for a sufficient length of time. In doing this the patient's economic means must be considered and conserved. Cooperation with health department and public agencies is essential. Individual assistance and cooperation of the county medical societies should be given to the project of educating the public. Every doctor must continually modernize his own education through reading, attendance on lectures, visits at clinics, etc. Assistance to accomplish these ends will be given by the Ohio State Medical Association.

11:30 to 12:15

ECZEMA AND ITS TREATMENT BY THE GENERAL PRACTITIONER

FRED WISE, *New York, N. Y.,*
Professor of clinical dermatology and syphilology, Postgraduate Medical School of Columbia University.

The treatment of the various forms of eczema by the general practitioner does not differ, except in unusually obstinate cases, from that of the specialist in dermatology. In the hands of both, the judicious employment of simple remedies usually produces lasting and permanent relief. In some respects the general practitioner has an advantage over the specialist. He is more likely to know more of the patient's habits, environments, indulgences in sports, contacts in home, office or factory. Or, taking infantile eczema as an example, he has better facilities and often a better training to enable him to cope with the problems of infant feeding, the detection and elimination of causative allergens, the supervision of the child's general health, etc. The specialist, on the other hand, is frequently of distinct service as a consultant when it comes to the management of obscure and recalcitrant cases of eczemas in which the discovery of the etiologic factors is often difficult and in which X-ray therapy is indicated.

SECOND GENERAL SESSION

Wednesday Afternoon, May 11

1:30 o'clock

Meeting Place—Main Ballroom, Mezzanine Floor.

STANLEY D. GIFFEN, *Toledo,* Member, Committee on Scientific Work, presiding.

1:30 to 1:45

TWO IMPORTANT FIRST-AID PROCEDURES WITH DEMONSTRATION BY MEMBERS OF OHIO STATE HIGHWAY PATROL

DREW L. DAVIES, *Columbus.*

Many injured persons have been more seriously injured by being lifted improperly. Demonstration will show how an injured person can be lifted and carried safely by three men and by six men. Resuscitation is not hard to perform if the operator knows how to do it. Correct position and rhythm to use in resuscitation demonstrated. Through the courtesy of Colonel Lynn Black, State Highway Patrol, several highway patrolmen will assist in the demonstration.

1:45 to 2:30

THE SELF-SELECTION OF DIET EXPERIMENT: ITS SIGNIFICANCE FOR FEEDING IN THE HOME

CLARA M. DAVIS, *Winnetka, Ill.,*
Associate attending physician, Children's Memorial Hospital, Chicago, Ill.

The self-selection of diet experiment with newly-weaned infants is briefly described and illustrated by motion pictures; its list of foods given and its nutritional results epitomized. The physiological bases of appetite as distinguished

from hunger are briefly discussed, as are also its limitations as a guide to eating. The significance of this experiment for the ordinary feeding of children in home and in hospital is mentioned and simple methods for the use of self-selection in their feeding under pediatric guidance are outlined.

THIRD GENERAL SESSION

Wednesday Evening, May 11

8:00 o'clock

Meeting Place—Main Ballroom, Mezzanine Floor.

JOHN B. ALCORN, *Columbus,* President, presiding.

OBSERVATIONS UPON EXPERIMENTAL AND CLINICAL USE OF SULFANILAMIDE AND ITS DERIVATIVES IN THE TREATMENT OF CERTAIN INFECTIOUS DISEASES

PERRIN H. LONG, *Baltimore, Md.,*
Associate professor of medicine, Johns Hopkins University School of Medicine.

During the last two years several hundred patients suffering from streptococcal, meningococcal, gonococcal and certain other bacterial infections have been treated in the wards of Johns Hopkins Hospital with sulfanilamide or "prontosil solution". In general the therapeutic effects of sulfanilamide in the treatment of susceptible infections have been brilliant. Certain of the treated patients have shown various toxic manifestations of the drug such as nausea, vomiting, cyanosis, acidosis, skin rashes, fever, acute hemolytic anemia and agranulocytosis. Discussion of methods of administration of sulfanilamide or "prontosil solution", the indications for the use of these drugs, the toxic effects noted as the result of sulfanilamide therapy and the therapeutic effects obtained in certain bacterial diseases.

BILATERAL RENAL CALCULI

IRVIN ABELL, *Louisville, Ky.,*
President-Elect of the American Medical Association, and clinical professor of surgery, University of Louisville School of Medicine.

Importance of preservation of renal function. Discussion of etiology. Discussion of question as to which kidney is to be operated on first, the good or the bad one. Are all cases of bilateral stones to be subjected to operation? Recurrences and their prevention.

FOURTH GENERAL SESSION

Thursday Afternoon, May 12

1:30 o'clock

Meeting Place—Main Ballroom, Mezzanine Floor.

ALBERT F. KUHL, *Dayton,* Member, Committee on Scientific Work, presiding.

1:30 to 2:00

THE EARLY DIAGNOSIS AND CARE OF PREGNANCY

H. E. MCCLENAHAN, *Youngstown,*
Representative from the Section on Obstetrics and Gynecology.

Early Diagnosis—The Arnold-Gruskin Test for pregnancy. Story of the development of the test. Technique. Personal experience with the test.

Treatment of Pregnancy—Care of normal cases: General examination; removal of bad teeth; treatment of incidental appendicitis, gall bladder disease, necrobiosis or red degeneration of fibroids of the uterus. Threatened abortion cases: Habitual abortion cases, their management and treatment. Treatment of hyperemesis: Glucose solution, isolation, eschatin, parathyroid. Treatment of eclampsia: Water balance treatment of Temple University, low salt; conservative—morphine, chloral hydrate, glucose; Cesarean section.

2:00 to 2:30

SURGICAL TREATMENT OF DIVERTICULITIS

THOMAS E. JONES, *Cleveland,*

Representative from the Section on Surgery.

Many cases of diverticulosis are asymptomatic and discovered only during routine roentgen examinations of the colon. Early management of colon may prevent complications, viz., inflammation in the diverticulum or diverticulitis. Even though diverticuli may be present throughout the colon, diverticulitis with obstruction or abscesses is practically always confined to the sigmoid colon. Symptoms vary from mild attacks of pain to signs of graver complications, as perforation with peritonitis or obstruction. Diagnosis of the fulminating variety is not easy and mortality is high. In subacute or chronic variety, sufficient time can be taken for accurate diagnosis and well-planned surgical attack. Treatment of chronic diverticulitis is medical until complications arise, namely, perforation with formation of abscess, perforation into a viscus, or obstruction. Management calls for considerable individualization. Experience with acute conditions of abdomen is necessary for good surgical judgment.

2:30 to 3:15

INFECTIONS OF THE HAND

SUMNER L. KOCH, *Chicago, Ill.,*

Associate professor of surgery, Northwestern University Medical School.

In spite of the general improvement and increased interest in the subject of infections of the hand that have resulted from Kanavel's important contributions upon the pathogenesis and treatment of such infections, they still constitute a major factor in the loss of time and function which follows injuries sustained by individuals whose livelihood depends upon their hands. Well considered first-aid treatment and exacting care of apparently trivial infections and injuries often prevent the development of major infections. In the presence of active infection accurate diagnosis, incisions which produce a minimum of injury, cleanly surgical treatment, rest secured with the help of appropriate splints, and concentration not only upon the problem of control of infection but of ultimate function as well are all essential factors in securing a successful result.

3:15 to 3:45

THE NEWER TREATMENT METHODS IN SCHIZOPHRENIA

E. A. BABER, *Cincinnati,*

Representative from the Section on Nervous and Mental Diseases.

General consideration of Schizophrenia (Dementia Praecox). Response to treatment hitherto more often unfavorable. Hypoglycemia (insulin) treatment gives encouragement in patients showing recent development of symptoms. Report of the results of this treatment for a period of one year. Present technique briefly described. Comparative value of irritative treatments (camphor and metrazol) in patients who have had symptoms over a term of years. Report of results obtained during the past eight months. Outline of methods used.

3:45 to 4:15

PASSIVE PROPHYLAXIS AGAINST ACUTE INFECTIONS IN CHILDHOOD

JOHN A. TOOMEY, *Cleveland,*

Representative from the Section on Pediatrics.

Many acute infections are now being prevented by the use of convalescent

serums. The methods and ways of thus treating children are described. The efficacy of such treatments is discussed and the practical manner in which serums may be obtained is alluded to.

4:15 to 5:15

HYPERTENSION

HUGO ROESLER, *Philadelphia, Pa.,*
Associate professor of radiology and cardiologist in the Department of Medicine, Temple University School of Medicine.

The following topics will be discussed: Pathology. Some clinical signs and symptoms with particular reference to left ventricular failure, treatment of premature ventricular beats, Cheyne-Stokes respiration, headache; the use of digitalis and sulphocyanates. Importance of eye-ground studies. Recent personal research will be presented representing correlation studies between retinal vascular changes, electrocardiographic alterations and heart size. Finally a prognostic evaluation will be given.

FIFTH GENERAL SESSION

Thursday Evening, May 12

7:30 o'clock

Meeting Place—Main Ballroom, Mezzanine Floor.

ANNUAL BANQUET

VERNE A. DODD, *Columbus,* Toastmaster

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1. Presentation of Past-President's gavel to Retiring President—E. M. Huston, Dayton, to John B. Alcorn, Columbus.
2. Introduction of Incoming President and the President-Elect.
3. Address by Guest Speaker.

SECTION ON MEDICINE . . .

C. L. McKIBBEN, *Toledo* ..... Chairman
JOHN NOLL, JR., *Youngstown* ..... Secretary

Wednesday Afternoon, May 11

2:30 o'clock

Meeting Place—Main Ballroom, Mezzanine Floor.

2:30 to 2:45

Minutes. Business. Selection of Nominating Committee.

2:45 to 3:00

HYPERPARATHYROIDISM

HAROLD F. KOPPE, *Dayton.*

Brief consideration of the subject as a whole with emphasis on the fact that hyperparathyroidism, a rare disease, is more common than is usually supposed. The diagnosis is not made because of lack of demonstrable bone pathology. Although bone changes are common in this disease they are not necessary to the diagnosis. In this event the chief changes are renal in character. It is estimated that between five and ten per cent of all kidney

stones are due to hyperparathyroidism. This disease presents an interesting diagnostic problem and it is unfortunate if the diagnosis is not made as the patient can be much improved by the proper treatment.

Discussion—5 minutes.

A. B. BROWER, *Dayton.*

General Discussion—10 minutes.

3:15 to 3:30

CHRONIC GASTRITIS

LEON SCHIFF, *Cincinnati.*

Review of study of a group of patients with this disease at the Cincinnati General Hospital, which cases were controlled by repeated gastroscopic examination and repeated examination of the gastric contents. Symptomatology considered in the three forms of gastritis, namely superficial, hypertrophic and atrophic. Relationship of gastritis to carcinoma and ulcer. Lantern slides illustrating the gastroscopic appearances of the different forms of gastritis. Prognosis and treatment outlined.

Discussion—5 minutes.

WALTER H. STIX, *Cincinnati.*

General Discussion—10 minutes.

3:45 to 4:00

ANGINA PECTORIS

JOHN T. QUIRK, *Piqua.*

Definition and meaning of term "angina pectoris". Age and sex incidence. Character of pain or oppression as described by patients. Location and radiation of the pain with special emphasis on the retrosternal location. Attitude of the patient during spontaneous and induced attacks. Precipitating factors. Associated cardiac conditions. Importance of the presence of hypertension in the diagnosis in females. Factors influencing prognosis. Medical treatment.

Discussion—5 minutes.

RUSSELL N. SPECKMAN, *Cincinnati.*

General Discussion—10 minutes.

4:15 to 4:30

THE VALUE OF THE ELECTROCARDIOGRAM IN THE DIFFERENTIAL DIAGNOSIS OF PULMONARY EMBOLISM

G. W. BRUGLER, *Cadiz.*

Clinical phases. Diagnostic problems of pulmonary embolism, particularly in relation to the confusing electrocardiographic findings sometimes obtained therein. Review of the pertinent literature. Short presentation of experimental results and conclusions.

Discussion—5 minutes.

ROY W. SCOTT, *Cleveland.*

General Discussion—10 minutes.

4:45 to 5:00

THE MANAGEMENT OF ARTERIAL INSUFFICIENCY IN THE EXTREMITIES

LOUIS G. HERRMANN, *Cincinnati.*

The practical aspects concerning the diagnosis and care of disturbances of arterial circulation in extremities will be discussed and the simpler means of differential diagnosis will be emphasized. The relative merits of the

general, medical, surgical and physical measures used in the management of arterial insufficiency in extremities will be discussed in detail. The lecture will be illustrated by lantern slides.

Discussion—5 minutes.

SAMUEL H. SEDWITZ, *Youngstown.*

General Discussion—10 minutes.

5:15 to 5:30

Election of Officers.

SECTION ON SURGERY . . .

ROBERT C. AUSTIN, *Dayton* ..... Chairman
W. K. ALLSOP, *Youngstown* ..... Secretary

Thursday Morning, May 12

9:00 o'clock

Meeting Place—Main Ballroom, Mezzanine Floor.

9:00 to 9:15

Minutes. Business. Selection of Nominating Committee.

9:15 to 9:30

MANAGEMENT OF BLADDER NECK OBSTRUCTIONS IN THE MALE

C. A. COLEMAN AND M. W. COLEMAN, *Dayton.*

Study of 1,600 supra-pubic prostatectomies and 500 transurethral resections. The pathology of the obstructing prostate gland; the clinical status of the patient; the basis for the surgical procedure chosen; and the end results are discussed.

Discussion—5 minutes.

FRANK W. HARRAH, *Columbus.*

General Discussion—10 minutes.

9:45 to 10:00

INDICATIONS FOR THE SURGICAL TREATMENT OF CHOLECYSTITIS AND CHOLELITHIASIS

CARL H. LENHART, *Cleveland.*

What is the natural history of untreated, i.e., unoperated, gall bladder disease, both as to morbidity and mortality? What has surgery to offer in comparison? What is the cost in operative mortality of securing these results? The operative mortality varies enormously. Danger of rupture in acute unoperated cases is exceedingly small and the mortality rate of cases operated in the acute stage excessively high. Review of 1,451 consecutive cases at Lakeside Hospital.

Discussion—5 minutes.

ELMER R. ARN, *Dayton.*

General Discussion—10 minutes.

10:15 to 10:30

THE USES AND ABUSES OF TRANSFUSION

WM. DEAN COLLIER, *Youngstown.*

Clearly indicated uses of transfusion are in those conditions demanding rapid satisfaction of absolute or relative blood cell or blood volume de-

ficiencies, namely, in well advanced anemia, peripheral vascular collapse, hemorrhagic diatheses due to the deficiency of substances necessary for clot formation, as a temporary relief during aplastic marrow states in which transfusion may compensate for the lack of hemopoiesis as well as stimulate marrow hemopoiesis and hypo-oxyphoremia. There appears to be considerable question as to the usefulness of transfusion in changing the course of infection unless an immunotransfusion is used and as to its usefulness pre-operatively unless an extensive procedure is contemplated. The abuses are the injudicious or even indiscriminate use of transfusion in spite of its known limitations and potential dangers. It is unsafe in the presence of myocardial insufficiency and congestive heart failure and any degree of incompatibility between donor and recipient. The particularly allergic recipient may present a special problem of incompatibility. Transfusion will be found a useful procedure if confined to properly selected cases.

Discussion—5 minutes.

F. W. McNAMARA, *Youngstown.*

General Discussion—10 minutes.

10:45 to 11:00

THE SURGICAL TREATMENT OF EPILEPSY

JOSEPH P. EVANS, *Cincinnati.*

Due largely to the work of Foerster and of Penfield, there has come to be an appreciation of the fact that there is a definite number of epileptic patients who are possessed of organic brain damage, the removal of which leads to amelioration of seizures and often times to their complete disappearance. This is the condition commonly referred to as "post-traumatic" epilepsy. Histological features briefly reviewed. It would, however, be a misconception to think of trauma, in its usual connotation, as the only cause of organic cerebral change resulting in epilepsy. Rather, all forms of injury to the brain—vascular, infectious, etc.—may result in cerebral cicatrization and may lead to seizures. The histological features of such lesions are briefly presented. The criteria by which cases suitable for operation may be selected are discussed. The operative treatment is reviewed and figures are given demonstrating the value of operation.

Discussion—5 minutes.

WM. JAMES GARDNER, *Cleveland.*

General Discussion—10 minutes.

11:15 to 11:30

OSTEOMYELITIS: DIAGNOSIS AND TREATMENT

GEORGE I. BAUMAN, *Cleveland.*

Acute osteomyelitis might better be termed acute metaphysitis. The infection is blood-borne, being carried to the bone from some distant focus of infection—a boil, infected blister or wound, infected throat, sinus, tooth or gland, or infection in the intestinal or urinary tract. An illustration to show the location of the original abscess in the metaphysis and the course of the spread of this infection into the joint or subperiosteally along the shaft. Importance of early incision into this abscess to prevent or limit further spreading of the infection. Importance of dependent or through and through drainage. Conservative treatment. Chronic osteomyelitis: Various types—diffuse, circumscribed, whole diaphysis, multiple. Radical treatment aiming to resect or remove the entire involved area (diaphysectomy). After-treatment.

Discussion—5 minutes.

HAROLD R. CONN, *Akron.*

General Discussion—10 minutes.

11:45 to 12:00

Election of Officers.

SECTION ON EYE, EAR, NOSE AND THROAT...

HUGH G. BEATTY, *Columbus* ..... Chairman
FRED W. DIXON, *Cleveland* ..... Secretary

Wednesday Afternoon, May 11

2:30 o'clock

Meeting Place—Colonial Room, Mezzanine Floor.

2:30 to 2:45

Minutes. Business. Selection of Nominating Committee.

2:45 to 3:00

THE MANAGEMENT OF BURNS OF THE CORNEA

ARTHUR M. CULLER, *Dayton.*

Importance of avoiding the use of antiseptics or other irritants. Experience with 15 cases of severe burns of the globe. Treatment in the first stage should include a minimum of manipulation and should be aimed primarily at minimizing the second stage rather than at neutralized chemical agents. Photographs show that prolonged irrigation with neutral ammonium tartrate or other neutralizing substances only increases the exudate in the second stage. Removal of foreign matter, continuous ice compresses, atropin, darkness and instillation of olive oil will minimize the second stage. In the third stage symblepharon can be largely avoided by keeping the conjunctival sac filled with olive oil. Avoidance of procedure which might increase the sterile reaction or light it up will be rewarded with a surprising return in function.

Discussion—5 minutes.

RALPH E. BOICE, *Toledo.*

General Discussion—10 minutes.

3:15 to 3:30

AIR BORNE DROPLET INFECTION

HARRY C. ROSENBERGER, *Cleveland.*

Clinical study of special health hazards of the otolaryngologist in treating patients, especially with regard to the use of nasal and throat sprays. Report of a series of cultures of expired air as it leaves the patient's nares during the procedure of atomization, together with cultures of the air in the treatment room, etc,. A brief resumé of the history of air borne droplet infection with a summary of recent work in this field.

Discussion—5 minutes.

O. J. WALKER, *Youngstown.*

General Discussion—10 minutes.

3:45 to 4:00

PROBLEMS ASSOCIATED WITH RECONSTRUCTIVE PROCEDURES FOR CLEFT LIP AND PALATE

JAMES O. BEAVIS, *Dayton.*

Problems which confront the surgeon in reconstructing congenital deformities of the mouth and jaws are many and varied. The embryological failure of

the parts to unite, places upon him a responsibility which means much to society. The individual with this malformation carries other stigmata which need consideration and add to the problems. Age has a great deal to do with the type of surgical procedures adopted. Different varieties of the same type of malformation must be considered before surgical approach is chosen. Due to the development of certain anatomical structures of the mouth and jaws, these structures have to be operated upon at a time when they lend themselves best to surgery. Importance of pre- and post-operative care cannot be stressed too strongly. These factors play an important role in the final result obtained, and even in preserving the life of the patient. In the past, importance of speech instruction to patients who have undergone palate surgery has not been stressed. This factor is as important as the operation itself.

Discussion—5 minutes.

FRED M. DOUGLASS, *Toledo*

General Discussion—10 minutes.

4:15 to 4:30

TECHNIQUE FOR LOCAL MASTOIDECTOMIES

MERLE EDISON SCOTT, *Massillon.*

In the practice of otolaryngology there often occurs mastoiditis following a severe coryza. At the same time there may be pulmonary complications such as pneumonia and pleurisy, or moist lungs during or after measles. Under such circumstances a general anesthetic for a mastoidectomy is a serious, and perhaps a fatal risk. We face the problem of doing a mastoidectomy without aggravating the original condition which caused the mastoiditis. There still remains a way out of the difficulty by local anesthesia, such as the procaine (novacaine) method, supplanted by avertin or nembutal, or the use of procaine with morphine and atropine.

Discussion—5 minutes.

HENRY M. GOODYEAR, *Cincinnati.*

General Discussion—10 minutes.

4:45 to 5:15

CANCER OF THE LARYNX, DIAGNOSIS AND TREATMENT WITH OBSERVATIONS ON THE RELATIONSHIP OF BENIGN TUMORS OF THE LARYNX TO CANCER

GABRIEL TUCKER, *Philadelphia, Pa.,*

Professor of bronchoscopy and laryngeal surgery, Graduate School of Medicine, and professor of clinical bronchoscopy and esophagoscopy, School of Medicine, University of Pennsylvania.

Cancer of the larynx is curable by surgical removal of the diseased area in a large percentage of the cases if diagnosed and treated early. Cancer begins in the interior of the larynx most frequently on the true vocal cords. When early cancer is found on the cord it can be cured by removal of the cord by the operation of laryngofissure. In early cases in which the situation of the cancer is not suitable for the removal by laryngofissure total laryngectomy will cure the disease. Excellent functional results are obtained by both methods of treatment. It is desirable always, of course, not to remove the larynx if it can be avoided. In the differential diagnosis, careful consideration must be given to benign tumors as well as lues and tuberculosis. Benign lesions may precede cancer. The removal of benign tumors will restore normal conditions in the larynx, phonation and prevent local trauma that may be a factor in the development of cancer. Illustrative cases will be presented showing the methods of diagnosis and treatment used and the results obtained in a series of over 300 cases.

5:15 to 5:30

Election of Officers.

SECTION ON OBSTETRICS AND GYNECOLOGY . . .

G. C. GILFILLEN, *Dayton* ..... Chairman
HOWARD P. TAYLOR, *Cleveland* ..... Secretary

Wednesday Afternoon, May 11

2:30 o'clock

Meeting Place—Main Dining Room, Lobby Floor.

2:30 to 2:45

Minutes. Business. Selection of Nominating Committee.

2:45 to 3:00

CHAIRMAN'S ADDRESS

G. C. GILFILLEN, *Dayton.*

3:00 to 3:15

THE MENOPAUSE

JAMES M. PIERCE, *Cincinnati.*

There are two important events in the life of every woman, i.e., the onset and the cessation of menstruation, indicating the beginning and ending of the reproductive function. These events are characterized by not only changes in the reproductive organs but by changes through the whole body, due to the activities of the endocrine glands and their influence upon the autonomic nervous system. In some the menopause is characterized by irregularity and cessation of menstruation; in others there is profuse and prolonged menstruation. Nervous symptoms vary from nervous instability to actual insanity. "Hot flashes" are common. Treatment consists in the administration of large doses of estrin in those women whose blood and urine show a decreased amount of estrin. In all cases of excessive bleeding a curettage should be performed to rule out a malignancy of the fundus.

Discussion—5 minutes.

WALTER W. BRAND, *Toledo.*

General Discussion—10 minutes.

3:30 to 3:45

POST-PARTUM FEVER

WALTER K. GREGG, *Dayton.*

Post-partum fever, consisting of the more common pathologic conditions, laying stress upon those things causing fever other than so-called childbed fever. The intention of this paper is to bring out the necessity of a careful physical examination and differential diagnosis in the recently-delivered woman.

Discussion—5 minutes.

CARL C. BORDEN, *Miamisburg.*

General Discussion—10 minutes.

4:00 to 4:15

EPISIOTOMY. TECHNIQUE OF REPAIR

MARTIN W. DIETHELM, *Toledo.*

The indications for episiotomy are well established and need no repetition. However, pain, edema, inflammation, and failure of primary union are inherent weaknesses. The factors involved are not so much the type of episiotomy performed, but the method of closure and the materials used. Heavy sutures resist tissue absorption, act as foreign bodies, and favor strangulation. Materials that project beyond the coaptated incision are subject to external traumas. Technique that has been free from these conveniences. Primary union and good support is the rule; the patient more often than not being unaware that an episiotomy wound was present. A single strand of No. 0 or No. 00 chromic catgut is used as a continuous, entirely subcuticular suture approximating in layers all structures, beginning and ending in the vagina. Motion pictures.

Discussion—5 minutes.

RAYMOND C. KING, *Toledo.*

General Discussion—10 minutes.

4:30 to 4:45

MEMBRANES

FLOYD S. MOWRY, *Cleveland.*

Advisability of rupturing the membranes in certain cases during labor to shorten the first stage. Function of the "bag of membranes" is the dilation of the cervix. Occasionally, the membranes are not elastic enough, or there is not enough water ahead of the head, and even under the extreme pressure of labor pains they do not bulge through the cervix or press against the cervix to soften or dilate. It is in these cases that it is advisable to rupture the membranes, causing more rapid dilation, thereby shortening the first stage of labor. If labor is induced by premature artificial rupture of membranes, all angles should be seriously considered.

Discussion—5 minutes.

JAMES L. REYCRAFT, *Cleveland.*

General Discussion—10 minutes.

5:00 to 5:15

DEHYDRATION TREATMENT OF PREGNANCY, AND ITS RELATED TOXEMIAS

GORDON L. ERBAUGH, *Dayton.*

Resumé of the dehydration treatment of pregnancy and its related toxemias. Statistics of Miami Valley Hospital on pregnancies and toxemias, and results of this treatment followed five or six years. Prenatal care as followed through in private practice, and hospital procedure. Summary of salient points.

Discussion—5 minutes.

KARL W. HORN, *Dayton.*

General Discussion—10 minutes.

5:30 to 5:45

Election of Officers.

SECTION ON PEDIATRICS . . .

A. G. HELMICK, *Columbus* ..... Chairman
E. A. PETERSON, *East Cleveland* ..... Secretary

Thursday Morning, May 12
9:00 o'clock

Meeting Place—Main Dining Room, Lobby Floor.

9:00 to 9:15

Minutes. Business. Selection of Nominating Committee.

9:15 to 9:30

MANAGEMENT OF THE NUTRITIONAL ANEMIAS

CARL V. MOORE, *Columbus.*

It is now well recognized that anemias may be produced by deficiencies of any of a number of essential food substances: Iron, copper, Vitamin C, Vitamin B_6, the anti-pernicious anemia factor, and possibly others as yet unrecognized. Furthermore, the specific deficiencies produce strikingly different types of anemias with the one exception that the blood pictures of iron and copper deficiencies are similar. For that reason, it becomes necessary to speak of the nutritional anemias as a group of diseases rather than of nutritional anemia as a specific entity. The role of the various essential nutritional factors in effecting normal erythropoiesis will be discussed, the characteristics of the nutritional types of anemia will be reviewed, and the therapeutic problems involved in attempts to correct the individual deficiencies will be outlined. It is emphasized that rational approach to therapeutic management is necessarily dependent on the recognition of the specific nutritional deficiency involved.

Discussion—5 minutes.

GEORGE M. GUEST, *Cincinnati.*

General Discussion—10 minutes.

9:45 to 10:00

HEREDITARY FACTORS IN GROWTH AND DEVELOPMENT

ALBERT J. BELL, *Cincinnati.*

Children are different at birth, grossly with reference to sex and race. The genetic influences may be traced to the original egg and sperm. The new born infant is the complete hereditary whole. Discussion of certain inherited characteristics and diseased states and the correlation between heredity and environment.

Discussion—5 minutes.

DONALD C. MEBANE, *Toledo.*

General Discussion—10 minutes.

10:15 to 10:30

ACUTE POLIOMYELITIS AS SEEN IN THE RECENT EPIDEMIC IN TOLEDO

HARRY G. PAMMENT, *Toledo.*

Short histories of a few atypical cases; theories as to etiology and transmissibility; results of quarantine and chemical methods of prevention; observations of the effectiveness of various forms of treatment.

Discussion—5 minutes.

LAWRENCE I. CLARK, *Toledo.*

General Discussion—10 minutes.

10:45 to 11:00

TREATMENT OF CONGENITAL SYPHILIS

E. W. NETHERTON, *Cleveland.*

Therapeutic problems of congenital syphilis are similar to those of acquired syphilis. However, due to the technical difficulties of certain therapeutic procedures, there is a tendency to undertreat infants and young children suffering from congenital syphilis. As in acquired syphilis, the prognosis and aims of treatment must be considered in terms of the stage of the infection. In early congenital syphilis, continuous and regular treatment such as is used in early acquired syphilis may produce a serologic and biologic cure in a good percentage of cases. However, in late congenital syphilis cures are less frequently obtained. The value of adequate treatment of late, asymptomatic, congenital syphilis in preventing late manifestations such as interstitial keratitis is discussed. It is important that in the estimation of the dosage of anti-syphilitic remedies the physical condition and weight of the child be considered. The relative value of anti-syphilitic drugs is discussed.

Discussion—5 minutes.

J. E. RAUSCHKOLB, *Cleveland.*

General Discussion—10 minutes.

11:15 to 11:30

INFANTILE ECZEMA

EARL H. BAXTER, *Columbus.*

Review of the etiology with especial emphasis on the allergic factor. The need for clarity of classification. An outline of treatment with attention to diet, environment conditions and topical applications.

Discussion—5 minutes.

BERMAN S. DUNHAM, *Toledo.*

General Discussion—10 minutes.

11:45 to 12:00

Election of Officers.

SECTION ON NERVOUS AND MENTAL DISEASES . . .

JOS. L. FETTERMAN, *Cleveland* ..... Chairman
A. T. HOPWOOD, *Orient* ..... Secretary

Thursday Morning, May 12

9:00 o'clock

Meeting Place—Colonial Room, Mezzanine Floor.

9:00 to 9:15

Minutes. Business. Selection of Nominating Committee.

9:15 to 9:30

HYPOPHYSEAL CACHEXIA (SIMMOND'S DISEASE)

MEL A. DAVIS, *Painesville,* and BEATRICE POSTLE, *Columbus.*

This rare disease has an insidious onset usually in females from the fourth to sixth decades characterized clinically by emaciation, prematurely senile

appearance (loss of hair and teeth, atrophy of jaw and wrinkling of skin) hypometabolism, hypotension, hypothermia, lowered B.M.R., general weakness, anemia, loss of libido, amenorrhea or impotence and psychic disturbances such as delusions, hallucinations, delirium, somnolence and coma. The pathology is without exception destruction of the anterior lobe of the hypophysis cerebri by tumor, cyst, simple fibrosis, tuberculosis, or syphilis. Differential diagnosis includes Addison's disease, malignancy, chronic infections and malnutrition of psychic origin. Treatment is by substitution therapy. Case 1—A 17 year old white male weighing 25 pounds who showed at autopsy a cyst of the pars intermedia markedly compressing the anterior lobe. Case 2—A 59 year old white female who showed marked emaciation, gastro-intestinal disturbances, hypothermia, hypotension, anemia and mental symptoms.

Discussion—5 minutes.

A. T. HOPWOOD, *Orient.*

General Discussion—10 minutes.

9:45 to 10:00

THE PERIODICITY OF THE MANIC-DEPRESSIVE PSYCHOSES

GEORGE T. HARDING, *Columbus.*

The general problem of periodicity has been referred to by Dr. William A. White as "the most outstanding characteristic of the manic-depressive group". Two unusual case reports demonstrating the existence of a biologically determined rhythm operating over a period of years are the subject of this discussion. Certain practical applications of this recognition of periodic mood-swings will be pointed out.

Discussion—5 minutes.

DOUGLAS A. JOHNSTON, *Cincinnati.*

General Discussion—10 minutes.

10:15 to 10:30

BENZEDRINE IN THE TREATMENT OF DEPRESSED PHASES OF PSYCHOTIC STATES

LEONARD M. DUB and LOUIS A. LURIE, *Cincinnati.*

Effects of benzedrine therapy in the depressed phase of various psychotic states. Fifty female patients selected for experiment. They were severely depressed and represented six types of psychoses. For four weeks all patients were given benzedrine tablets, one tablet before breakfast and one after lunch. This was followed by a similar period during which the patients were given a placebo. This in turn was followed by a period during which no medication whatsoever was given, after which the patients were again placed upon treatment with a placebo. Finally, the patients were again placed on benzedrine therapy. Both the physical and mental changes were recorded. Observations were made both by attendants and the physician in charge of the experiment. Results led the authors to conclude that benzedrine is of definite value in the treatment of the depressed phase of many psychotic states.

Discussion—5 minutes.

JOS. L. FETTERMAN, *Cleveland.*

General Discussion—10 minutes.

10:45 to 11:00

THE IRRITATIVE TREATMENT OF SCHIZOPHRENIA

GUY H. WILLIAMS, JR., HELEN M. KINGSBURY, and DAVID E. BIXBY, *Cleveland.*

Presentation will include brief historical review, rationale of therapy, method of treatment, laboratory findings, complications, and results obtained

to date. This series is of interest because of the more or less chronic nature of the disease in the cases treated.

Discussion—5 minutes.

DOUGLAS GOLDMAN, *Cincinnati.*

General Discussion—10 minutes.

11:15 to 11:30

CLINICAL EXPERIENCES WITH INSULIN THERAPY IN SCHIZOPHRENIA

ROGER F. SCHERB and CHARLES W. STONE, *Cleveland.*

Patients with schizophrenic symptoms of varying duration were treated by insulin therapy in the Psychopathic Department of Cleveland City Hospital. Some interesting complications were encountered. The results have been encouraging in that more than half the patients in this series have improved to such an extent that they have been able to go home from the hospital.

Discussion—5 minutes.

RICHARD E. STOUT, *Cleveland.*

General Discussion—10 minutes.

11:45 to 12:00

Election of Officers.

PUBLIC HEALTH LUNCHEON . . .

(SPANISH ROOM, DESHLER-WALLICK HOTEL)

Under the auspices of the Section on Public Health and Preventive Medicine, a round-table luncheon will be held Wednesday noon, May 11, in the Spanish Room, Deshler-Wallick Hotel, Broad and High Streets. This will be the only official event on the program which will be held outside the Neil House. All members will be welcome at the luncheon and program which will follow. Tickets may be purchased near the Registration Headquarters, Mezzanine Floor, Neil House. Members wishing to attend are respectfully requested to buy their tickets early so that the proper number of luncheon reservations can be made. The program, arranged by Dr. H. H. Pansing, Dayton, chairman, and Dr. Wm. E. Blair, Lebanon, secretary, of the section, is as follows:

"Newer Developments in Public Health Laboratory Service", Mr. Leo F. Ey, Columbus, chief, Division of Laboratories, State Department of Health. Improved methods and technic employed in the examination of specimens within the realm of public health activities will be discussed. Additional diagnostic services furnished to the general practitioner will be described. Emphasis will be given to the importance of having dependable local laboratories and a feasible plan of coordinating public health laboratory services.

"Modern Therapeutic Methods in Pulmonary Tuberculosis; Their Relation to the Public Health", Warren C. Breidenbach, M.D., Dayton, member of the Ohio Public Health Council. Status of compression therapy in 1918; evolution of artificial pneumothorax from 1921 to 1931; pneumothorax and the patient; pneumothorax and the institution; additional and adjunct measures; bilateral artificial pneumothorax and the status of compression therapy in 1938 will be covered in the address.

SCIENTIFIC EXHIBITS . . .

JUNIOR BALLROOM, MEZZANINE FLOOR, NEIL HOUSE
8:30 A.M. TO 7:00 P.M. DAILY

CHRONIC ARTHRITIS

Russell L. Haden, M.D., and W. J. Zeiter, M.D., Cleveland, O.

Models, charts and transparencies.

MODEL MODERN PHARMACY

Ohio State Pharmaceutical Association and Columbus Academy of Pharmacy.

Exhibit of USP and NF prescriptions, educational in scope, for the purpose of promoting their use and stimulating use of facilities of up-to-date pharmacy by physicians.

DIFFERENTIAL DIAGNOSIS OF PELVIC PATHOLOGY IN THE FEMALE

George Lyford, M.D., Cincinnati, Ohio.

Display of apparatus for procuring essential data in the differential diagnosis of pelvic pathology in the female and stages of its development.

ENCEPHALOGRAPHIC FINDINGS IN HEAD INJURIES

Eugene Freedman, M.D., Henry T. Stiles, M.D., Joseph L. Fetterman M.D., and Claude S. Beck, M.D., Cleveland, Ohio.

Transparencies showing cortical and cerebral changes in post-traumatic cases.

HOME TREATMENT OF PERIPHERAL VASCULAR DISEASES

Samuel H. Sedwitz, M.D., Youngstown, Ohio.

Demonstration of apparatus, with patient present. Photographs and charts.

PHYSIOLOGICAL AND ANATOMICAL CHANGES FOLLOWING CEREBRAL ARTERIAL OCCLUSION

Joseph P. Evans, M.D., Cincinnati, Ohio.

Photographs illustrating normal arterial circulation in man and monkey. Arterial circulation in the monkey immediately after vascular obstruction. Late changes in the brain resulting from arterial occlusion, human and experimental material, with notes on the degree of recovery of function.

ARTERIO-VENOUS ANEURYSMS

Mont R. Reid, M.D., and Louis G. Herrmann, M.D., Cincinnati, Ohio.

Illustrations and special preparations to demonstrate the anatomy, physiology and pathologic-physiology of the circulation resulting from abnormal communications between arteries and veins.

TREATMENT OF ACUTE ATTACK OF BRONCHIAL ASTHMA WITH AMINOPHYLLIN

Morris W. Selman, M.D., Toledo, Ohio.

Summary of experimental study by use of charts.

PREVENTION AND CURE OF PERITONITIS

Bernhard Steinberg, M.D., Toledo, Ohio.

Placards showing developmental stages of peritonitis and a method of protecting against peritonitis.

STRICTURE OF THE RECTUM (LYMPHOGRANULOMA VENEREUN)

A. Gerson Carmel, M.D., Cincinnati, Ohio.

Drawings, diagrams, photographs, placards and charts. Radiographs, histologic sections.

PSEUDO-FRACTURES

Walter C. Hill, M.D., Merthyn A. Thomas, M.D., Harry L. Farmer, M.D., and George L. Sackett, MD., Cleveland, Ohio.

Roentgenographic appearances which may lead to the incorrect diagnosis of fractures.

ENCEPHALOGRAPHY

Industrial Commission of Ohio.

Encephalograms in translucent box posters. Demonstration of the use of encephalography as an aid to the diagnosis of old cranial injuries.

PATHOLOGICAL PHYSIOLOGY OF THE PITUITARY, OVARIES AND UTERUS IN FEMALE DYSFUNCTION

Wynne M. Silbernagel, M.D., and R. S. Fidler, M.D., Columbus, Ohio.

Approximately 300 lantern slide transparencies, mostly in color, illustrating developmental sequences of endocrine dysfunction in the female.

PREVENTIVE DENTISTRY, CONTROL OF VENEREAL AND COMMUNICABLE DISEASES, LABORATORY METHODS

Department of Health of Ohio.

Charts, posters, and other descriptive material.

GASTROSCOPY

Leon Schiff, M.D., Cincinnati, Ohio.

Demonstration of instrument by use of models. Motion pictures of technique and commonly seen lesions in kodachrome, X-ray films, drawings of gastroscopic findings. Gross and microscopic specimens in selected cases with clinical summaries.

HYPERTHYROIDISM IN THE EXTREMES OF LIFE

George Crile, Jr., M.D., Cleveland, Ohio.

Card and pictures demonstrating the differences in the reaction of the child and the elderly patient to hyperthyroidism.

DIAGNOSIS AND TREATMENT OF THE PNEUMONIAS

(Red Room, Southwest Corner, Mezzanine Floor).

M. A. Blankenhorn, M.D., and Julien E. Benjamin, M.D., Cincinnati, Ohio, Department of Internal Medicine, University of Cincinnati.

Motion pictures, X-ray display, statistical data, educational posters, typing demonstration. Brief lectures.

BREAST TUMORS

Horace B. Davidson, M.D., Columbus, Ohio.

Charts and photographs.

THE VALUE OF PLAIN FILMS OF THE ABDOMEN

Huston F. Fulton, M.D., Columbus, Ohio.

Display of X-ray films demonstrating value of plain films of the abdomen.

THE FOURTH, FIFTH AND SIXTH VENEREAL DISEASES

Emmerich von Haam, M.D., and Ralph M. Hartwell, M.D., Columbus, Department of Pathology, Ohio State University.

A comparative clinical, pathological and experimental study of venereal fusospirochetosis, granuloma venereum, and lymphogranuloma inguinale.

SURGICAL TREATMENT OF CRANIAL NERVE LESIONS

W. JAMES GARDNER, M.D., and WILLIAM A. NOSIK, M.D., Cleveland, Ohio.

Pictorial demonstration of the surgical procedures in the various cranial nerve involvements.

OBJECTIONABLE COSMETICS

American Medical Association, Chicago, Illinois.

An exhibit from the Bureau of Investigation of the American Medical Association, dealing with various objectionable cosmetics that have been or are now on the market and which are potential sources of danger, together with descriptive material covering some 75 different articles.

HEALTH EDUCATION BY RADIO

American Medical Association, Chicago, Illinois.

An exhibit from the Bureau of Health and Public Instruction, American Medical Association, dealing with the broadcasts being presented this year on "Your Health", showing topics covered, the workbook for use in schools, etc.

PNEUMONIA EXHIBIT AND LECTURES . . .

A special exhibit and demonstration covering the diagnosis and treatment of the pneumonias will be presented during the two-day meeting in the Red Room, Southwest Corner, Mezzanine Floor, Neil House, by Dr. M. A. Blankenhorn and Dr. Julien Benjamin, Department of Internal Medicine, University of Cincinnati. Statistical data and educational posters will be shown. Pneumonia typing will be demonstrated. Lectures will be given periodically, supplemented by motion pictures. This clinical demonstration should be of special interest to general practitioners and internists.

ESSAYISTS-DISCUSSANTS . . .

Essayists and discussants are requested to comply with Sections 5 and 7 of Chapter 3 of the By-Laws of the Ohio State Medical Association reading in part as follows:

"The papers and discussions in sections shall be limited to scientific subjects."

"All papers read before this Association shall be its property and *immediately after being read shall be deposited with the secretary of the section,* if read before a section, or with the Executive Secretary, if read before a general session. No author shall cause a paper read before this Association to be published elswhere as original, or until published in the official *Journal* of this Association."

Discussants should send typewritten copies of their remarks to *The Ohio State Medical Journal,* 1005 Hartman Theater Building, Columbus, in order that their discussions may be published in *The Journal* with the respective papers. Such material should be sent not later than two weeks after the Annual Meeting.

ENTERTAINMENT FOR WOMEN GUESTS . . .

An elaborate program of entertainment for the wives and daughters of members, accompanying them to Columbus for the two-day meeting, and of Columbus members has been arranged under the direction of a committee of wives of Columbus physicians, namely: Mrs. Huston F. Fulton, chairman, Mrs. J. E. Brown, Jr., Mrs. Harry LeFever, Mrs. Russel G. Means, Mrs. Link Murphy, Mrs. Francis Thomas, Mrs. W. B. Morrison, Mrs. H. M. Clodfelter and Mrs. Bruce E. Lindsey. Tentative program arranged includes a visit to the Columbus Gallery of Fine Arts, followed by a tea at the gallery on the afternoon of May 11; golf on Thursday morning, May 12, for those who wish to play at the Scioto Country Club, followed by a luncheon and bridge party (with prizes) at the country club. On Thursday evening, wives and daughters, of course, will want to attend the Annual Banquet at the Neil House. The Thursday, May 12, luncheon and bridge party will be in honor of Mrs. J. H. J. Upham, Columbus, wife of the president of the American Medical Association; Mrs. John B. Alcorn, Columbus, and Mrs. Barney J. Hein, Toledo, wives of the president and president-elect of the Ohio State Medical Association, respectively. A special registration headquarters for women guests will be arranged at which tickets for the luncheon may be purchased and information obtained regarding the other events. Wives and daughters will be assured of an exceptionally delightful time during their stay in Columbus by taking advantage of this especially-arranged program of social affairs.

REGISTRATION . . .

In compliance with Chapter 1 of the By-Laws of the Ohio State Medical Association, only physicians who are members in good standing in the Association will be permitted to register and attend the various sessions of the Annual Meeting, except physicians who reside in other states and are members in good standing of their respective state medical associations. Medical students, interns and members of other scientific professions may register as guests and will be admitted to all sessions.

Admission to all sessions will be by badge only, which badge may be secured upon registering. Registration Headquarters will be open daily from 8:30 A. M. to 5:30 P. M., on the Mezzanine Floor, Neil House, Northeast Corner of Technical Exhibit Hall. Registration headquarters for women guests will be adjacent to general Registration Headquarters.

HOBBY SHOW . . .

Following the precedent established at the 1937 Annual Meeting at Dayton, a Hobby Show will be held as one of the informal feature attractions of the 1938 Annual Meeting program. The show will be staged in the Garden Room, Birch Room and Walnut Room, located at the Southwest Corner of the Mezzanine Floor, Neil House. Arrangements are being handled by a committee of the Columbus Academy of Medicine, composed of Dr. Paul W. Palmer, chairman, Dr. H. M. Gilmore, and Dr. C. W. McGavran. Members wishing to enter exhibits in the Hobby Show should communicate with Dr. Palmer, 115 South Grant Avenue, Columbus. Use the application blank appearing elsewhere in this issue.

GROUP LUNCHEONS AND DINNERS . . .

Officers of the Section on Nervous and Mental Diseases have arranged for a luncheon of members interested in that specialty at noon on Thursday, May 12, in Parlors A, B, and C, Deshler-Wallick Hotel. The luncheon will follow the meeting of the Section at the Neil House. Complete details relative to the luncheon will be announced at the section meeting. Arrangements are in charge of Dr. Jos. L. Fetterman, Cleveland, chairman, and Dr. A. T. Hopwood, Orient, secretary of the section.

* * *

All physicians interested in allergy are invited to a round-table discussion and luncheon at the Neil House, Wednesday, May 11. Arrangements are in charge of Dr. William F. Mitchell, Columbus, with whom reservations should be made. The topic to be discussed is "Allergic Reactions to Moles As a Complication to Seasonal Hay Fever".

* * *

Women physicians attending the Annual Meeting are cordially invited to attend a luncheon on Thursday noon, May 12, at the Neil House, sponsored by the Columbus Women's Medical Club. Arrangements are in charge of Dr. Pauline P. Rossel, Columbus, with whom reservations should be filed.

ANNUAL BANQUET . . .

Chief social function of the Columbus meeting will be the Annual Banquet, sponsored by the Columbus Academy of Medicine, on Thursday evening, May 12, in the Main Ballroom, Neil House. The banquet is scheduled for 7:30 o'clock. It starts promptly at that hour. There will be no table reservations except for the wives and daughters of those seated at the speakers' table. Tickets for this gala occasion will be placed on sale soon after the meeting opens. Members are urged to purchase banquet tickets early to assist the committee in making the proper number of reservations. Appropriate entertainment is being arranged by the committee. Announcement of the banquet program cannot be made at this time but the committee promises a real treat for all who attend. Plan now to remain for the Annual Banquet on Thursday evening, May 12.

SPECIAL TRAIN TO A.M.A. MEETING . . .

Members who are planning to attend the 1938 session of the American Medical Association at San Francisco, June 13-17, who have not completed plans for the trip by the time of the Columbus meeting, should visit the special booth in the Technical Exhibit marked, "Ohio State Medical Association Special Train to San Francisco". There complete details regarding the "Ohio Special", including a folder on the itinerary, costs, etc., may be obtained and reservations made. If this is news to any member, he should turn to pages 313-320 of the March, 1938, issue of *The Ohio State Medical Journal* where he can read about this alluring trip through the West to and from the A.M.A. meeting at exceptionally reasonable cost. It will be the chance of a life-time for a member to take himself and his family on a real vacation trip, plus the added advantage of attending the A.M.A. meeting.

TECHNICAL EXHIBITORS . . .

MEZZANINE FLOOR, NEIL HOUSE, 8:30 A.M. TO 7:00 P.M. DAILY

Company	Booth Number	Address
Aloe Co., A. S.	No. 18	St. Louis, Mo.
American Optical Co.	No. 35	Southbridge, Mass.
Arlington Chemical Co.	No. 30	Yonkers, New York
Bowman Bros. Drug Co.	No. 43	Canton, Ohio
Cameron Surgical Specialty Co.	No. 47	Chicago, Ill.
Camp & Co., S. H.	No. 20	Jackson, Mich.
Coca-Cola Co.	No. 41	Atlanta, Georgia
DeVilbiss Co.	No. 29	Toledo, Ohio
Electro-Medical Equipment Co.	No. 25	Cleveland, Ohio
Frober-Faybor Co.	No. 49	Cleveland, Ohio
General Electric X-Ray Corp.	No. 32	Chicago, Ill.
Gerber Products Co.	No. 22	Fremont, Mich.
Heinz Co., H. J.	No. 12	Pittsburgh, Pa.
Holland-Rantos Co., Inc.	No. 44	New York City
Horlick's Malted Milk Corp.	No. 31	Racine, Wis.
Hynson, Westcott & Dunning, Inc.	No. 16	Baltimore, Md.
Jones Metabolism Equipment Co.	No. 26	Cleveland, Ohio
Jones Metal Products Co.	No. 9	West Lafayette, Ohio
Jones Surgical Supply Co.	No. 4	Cleveland, Ohio
Lederle Laboratories, Inc.	No. 27	New York City
Liebel-Flarsheim Co.	No. 42	Cincinnati, Ohio
Lippincott Co., J. B.	No. 45	Philadelphia, Pa.
McIntosh Electrical Corp.	No. 19	Chicago, Ill.
Mead Johnson & Co.	Nos. 38, 39	Evansville, Ind.
Medical Protective Co.	No. 11	Wheaton, Ill.
Mellin's Food Co.	No. 36	Boston, Mass.
Merrell Co., Wm. S.	No. 34	Cincinnati, Ohio
M. & R. Dietetic Laboratories, Inc.	No. 15	Columbus, Ohio
Mosby Co., C. V.	No. 14	St. Louis, Mo.
Nestle's Milk Products, Inc.	No. 24	New York City
Petrolagar Laboratories, Inc.	No. 28	Chicago, Ill.
Philip Morris & Co., Ltd., Inc.	No. 10	New York City
Rose Mfg. Co., Inc., E. J.	No. 6	Cleveland, Ohio
Saunders Co., W. B.	No. 23	Philadelphia, Pa.
S. M. A. Corp.	Nos. 2, 3	Cleveland, Ohio
U. S. Standard Products Co.	No. 33	Woodworth, Wis.
Wagner's Sons Co., W. T.	No. 13	Cincinnati, Ohio
Wallace & Tiernan Products, Inc.	No. 5	Belleville, N. J.
Wendt-Bristol Co.	No. 1	Columbus, Ohio
Westinghouse X-Ray Co., Inc.	No. 40	Long Island City
White-Haines Optical Co.	No. 46	Columbus, Ohio
Wocher & Son Co., Max	No. 37	Cincinnati, Ohio
Wyeth & Brother, Inc., John	No. 21	Philadelphia, Pa.
Zemmer Co.	No. 17	Pittsburgh, Pa.

ANNUAL MEETING COMMITTEES . . .

STATE ASSOCIATION

Committee on Scientific Work

C. C. SHERBURNE, Columbus, *Chairman*

Stanley D. Giffen, Toledo
Claude B. Norris, Youngstown
Albert F. Kuhl, Dayton
M. M. Zinninger, Cincinnati

COLUMBUS COMMITTEES

VERNE A. DODD, *General Chairman*

Reception

LESLIE L. BIGELOW, *Chairman*

J. F. Bateman
André Crotti
Charles A. Doan
E. J. Emerick
Jonathan Forman
Mary Ann Graber
Sidney McCurdy
W. B. Morrison
H. M. Platter
Joseph Price
Charles J. Shepard
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J. H. J. Upham

Halls and Meeting Places

BURTON F. BARNEY, *Chairman*

H. M. Clodfelter
A. A. Hall
Robert C. Kirk
Tom F. Lewis
Thomas F. Ross

Annual Banquet

LOUIS N. JENTGEN, *Chairman*

George T. Harding
Russel G. Means
Edwin J. Stedem
J. W. Wilce

Hobby Exhibit

PAUL W. PALMER, *Chairman*

H. M. Gilmore
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Projection Apparatus

HARRY L. REINHART, *Chairman*

H. B. Davidson
Gilman D. Kirk

Entertainment for Women Guests

MRS. HUSTON F. FULTON, *Chairman*

Mrs. J. E. Brown, Jr.
Mrs. H. M. Clodfelter
Mrs. Harry LeFever
Mrs. Bruce E. Lindsey
Mrs. Russel G. Means
Mrs. Link Murphy
Mrs. W. B. Morrison
Mrs. Francis Thomas

When you make preparations for attending the Ninety-Second Annual Meeting, plan to be in Columbus early enough so that you can attend the First General Session, which begins at 10:30 A.M., Wednesday, May 11, an innovation in Annual Meeting programs. The guest speaker at this session will be Dr. Fred Wise, New York, distinguished dermatologist. Dr. Clyde L. Cummer, Cleveland, will speak as the representative of the Section of Medicine and Dr. Charles E. Kinney, Cleveland, will represent the Section on Eye, Ear, Nose and Throat.

DEMAND FOR HOTEL ROOMS DURING 1938 ANNUAL MEETING IS HEAVY; BETTER SEND YOUR RESERVATION IN IMMEDIATELY

COLUMBUS hotels report an unusually large number of requests for hotel reservations already received for Wednesday and Thursday, May 11 and 12, when the Ninety-Second Annual Meeting of the Ohio State Medical Association will be held at the Neil House, Columbus.

Have you sent in your reservations? If not, please do so immediately, and thus assure yourself of the accommodations you desire.

A list of Columbus hotels and their rates is appended herewith. Look it over, decide what you want and send your request for reservations **immediately** on the attached blank, **to the manager of the hotel selected.**

Columbus has excellent hotel facilities, but the surest way to get the kind of room you want at the price you want to pay, is to make your reservation NOW.

NAME AND LOCATION	No. of Rooms	Single	Double	Double Twin Beds	Suites
NEIL HOUSE (Headquarters Hotel) 35 South High St.	665	$3.00–5.00	$4.50–6.00	$5.00–7.00	$7.00 and up
DESHLER-WALLICK Broad and High Sts.	1000	3.00–7.00	4.50–10.00	5.00–10.00	8.00 to 18.00
FORT HAYES 31 W. Spring St.	350	2.00–3.50	3.50–6.00	4.00–8.00	7.00 to 18.00
CHITTENDEN High and Spring Sts.	275	2.00–3.00	3.00–4.00	3.50–6.00	
SENECA 361 E. Broad St.	250	2.00	3.00 and up	4.50–6.00	5.00 and up
SOUTHERN High and Main Sts.	250	2.00–3.00	3.00–4.00	4.00–4.50	
VIRGINIA Third and Gay Sts.	150	2.00 and up	3.00 and up	4.00 and up	5.00 and up
BROAD-LINCOLN 631 E. Broad St.	140	2.00 and up	3.00 and up	4.50 and up	3.50 and up

HOTEL RESERVATION BLANK

Mail this coupon to hotel selected

Manager _____ Hotel, Columbus, Ohio.

You are requested to reserve the following accommodations during the period of the Annual Meeting of the Ohio State Medical Association, May 11-12, 1938, or for such other period as may be indicated herein.

☐ Single Room with bath ☐ Double Room with bath Price: _____

☐ Twin Bed Room with bath ☐ Suite

Arriving May _____ at _____ A.M. _____ P.M.

PLEASE VERIFY MY RESERVATION.

Name _____

Address _____

_____

ANNUAL OHIO STATE MEDICAL GOLFERS' TOURNAMENT TO BE HELD MAY 10 AT THE SCIOTO COUNTRY CLUB, COLUMBUS

MEDICAL golfers throughout the state will have another treat in store for them when they gather for the Eighteenth Annual Tournament of the Ohio State Medical Golfers' Association which will be held at the Scioto Country Club, Columbus, Tuesday, May 10.

Dr. R. P. (Dick) Bell, Cleveland, President of the Association, and the Columbus Committee, under the chairmanship of Dr. Roy J. Secrest, are planning arrangements that will make this one of the outstanding tournaments in the history of the organization.

The Scioto Country Club is one of the smartest and most difficult courses in the state. It will test the mettle of all players. The clubhouse provides every facility for recreation and good-fellowship.

The program of events this year will be arranged to furnish the ultimate in enjoyment for every player. There will be the usual traditional trophies for the championship events but the average player will have an equal chance to win a prize. As for the prizes—there will be enough to cover the entire field of players. Without giving away too many secrets, who wouldn't be tickled to take home a beautiful electric roaster, grill, waffle iron or similar prize that has utility as well as beauty? Handicap events will be taboo this year.

Dr. J. J. Marek, present holder of the association championship and also winner in 1934, will be present to defend his laurels against all contenders for the honor. Keen competition will be offered by Dr. Wm. A. Welsh of Youngstown, Dr. J. D. Fouts of Dayton, and other former and hopeful titleholders. Since the tournament is being held in May this year, a large attendance is expected and the Columbus Committee is leaving nothing undone to make this annual reunion of medical golfers a day long to be remembered as a good-fellowship classic.

Officers of the State Medical Golfers' Association for this year are: President, Dr. R. P. Bell, Cleveland; First Vice-President, Dr. Roy J. Secrest, Columbus; Second Vice-President, Dr. A. K. Howell, Springfield; Third Vice-President, Dr. A. C. Smith, Wooster; Fourth Vice-President, Dr. C. F. Wharton, Akron; Fifth Vice-President, Dr. J. D. Knox, Warren; Secretary, Mr. H. C. Gerber, Toledo.

Every male member of the Ohio State Medical Association is eligible for life membership in the Ohio State Medical Golfers' Association, upon the payment of a $2.00 enrollment fee. Physicians wishing to join the association as new members can pay this $2.00 fee in Columbus on the day of the tournament. Announcements will be mailed to all members prior to May 10 as a reminder.

COMING MEETINGS

Ohio State Medical Association, Columbus, May 11-12.

American Medical Association, San Francisco, June 13-17.

American Association for Thoracic Surgery, Atlanta, Ga., April 4-6.

American Association of Anatomists, Pittsburgh, April 14-16.

American Association of Genito-Urinary Surgeons, Atlantic City, May 2-4.

American Association of Pathologists and Bacteriologists, Atlantic City, May 3-4.

American Association of the History of Medicine, Atlantic City, May 2.

American Association on Mental Deficiency, Richmond, Va., April 20-23.

American Bronchoscopic Society, Atlantic City, April 30.

American College of Physicians, New York, April 4-8.

American College of Surgeons, New York, Oct. 17-21.

American Gastro-Enterological Association, Atlantic City, May 2-3.

American Laryngological Association, Atlantic City, May 2-4.

American Laryngological, Rhinological and Otological Society, Atlantic City, April 27-29.

American Neurological Association, Atlantic City, May 2-6.

American Orthopedic Association, Atlantic City, May 3-5.

American Public Health Association, Kansas City, Oct. 25-28.

American Society for Clinical Investigation, Atlantic City, May 2.

American Surgical Association, Atlantic City, May 2-4.

American Therapeutic Society, New York, April 1-2.

Association of American Physicians, Atlantic City, May 3-5.

Association of Military Surgeons of the United States, Rochester, Minn., Oct. 13-15.

Congress of American Physicians and Surgeons, Atlantic City, May 3-4.

Ohio Hospital Association, Columbus, April 5-7.

Tri-State Medical Association, Findlay, April 12.

SEVEN DISTINGUISHED OUT-OF-STATE GUEST SPEAKERS WILL ADDRESS SESSIONS OF ANNUAL MEETING, MAY 11 AND 12

ONE of the many reasons why all members of the Ohio State Medical Association should attend the Ninety-Second Annual Meeting at the Neil House, Columbus, Wednesday and Thursday, May 11 and 12, is the opportunity presented of hearing seven distinguished out-of-state guest speakers and nationally recognized authorities. The Committee on Scientific Work feels that it is unusually fortunate in having its invitation to appear on the program accepted by these outstanding physicians.

A short biographical sketch of each of the guest speakers follows:

* * *

DR. IRVIN ABELL, Louisville, Ky., President-Elect of the American Medical Association and clinical professor of surgery, University of Louisville School of Medicine since 1904, will address the Third General Session, Wednesday evening, May 11, at 8 o'clock, on "Bilateral Renal Calculi".

A graduate of the Louisville Medical College in 1897, Dr. Abell has practiced in Louisville since 1900. He is a member and former president of the Kentucky State Medical Association, the Southern Surgical Association and the Southern Medical Association. Dr. Abell is also a Fellow of the American College of Surgeons, a member of the American Gastro-Enterological Association and the Radiological Society of North America. He is visiting surgeon at Louisville Public Hospital and consulting surgeon at Children's Free and other Louisville hospitals.

* * *

DR. PERRIN H. LONG, Baltimore, Md., associate professor of medicine, Johns Hopkins University School of Medicine, will share with Dr. Abell the program at the Third General Session, Wednesday evening, May 11, at 8 o'clock on "Observations Upon the Experimental and Clinical Use of Sulfanilamide and Its Derivatives in the Treatment of Certain Infectious Diseases".

Dr. Long has done considerable research in this field, and has presented his findings at many medical meetings. A graduate of the University of Michigan Medical School in 1924, Dr. Long is associate physician at Johns Hopkins Hospital, and a member of the American Society for Clinical Investigation, Harvey Society and the Society of American Bacteriologists.

* * *

DR. CLARA M. DAVIS, Winnetka, Illinois, associate attending physician, Children's Memorial Hospital, Chicago, Ill., will speak on "The Self-Selection of Diet Experiment: Its Significance for Feeding in the Home", at the Second General Session, Wednesday afternoon, May 11, at 1:45 o'clock.

A member of the Chicago Pediatric Society and American Academy of Pediatrics, Dr. Davis has been widely acclaimed for her work in the subject which she will present. She graduated at the University of Michigan Medical School in 1904, and practiced in Cleveland for 10 years, during which time she was a member of the Ohio State Medical Association. She is now a member of the Illinois State Medical Society and a Fellow of the American Medical Association. Dr. Davis also is a lecturer on nutrition at the Northwestern University Dental School.

* * *

DR. SUMNER L. KOCH, Chicago, Illinois, associate professor of surgery, Northwestern University Medical School, will discuss "Infections of the Hand", at the Fourth General Session, Thursday afternoon, May 12, at 2:30 o'clock.

A graduate of Northwestern University Medical School in 1914, Dr. Koch is a member of the Illinois State Medical Society, Fellow of the American Medical Association, and the American College of Surgeons, member of the Chicago Surgical Society, Society of Clinical Surgery, American Surgical Association and the Western Surgical Association. He is attending surgeon at Passavant Memorial and Cook County hospitals, Chicago.

* * *

DR. FRED WISE, New York, N. Y., professor of clinical dermatology and syphilology, Postgraduate Medical School of Columbia University, will discuss "Eczema and Its Treatment by the General Practitioner", at the First General Session, Wednesday morning, May 11, at 11:30 o'clock.

Dr. Wise graduated at the College of Physicians and Surgeons, Columbia University, in 1904. He is attending dermatologist and syphilologist at the Postgraduate Hospital of Columbia University; chief of clinic, skin and cancer unit, Postgraduate Hospital, and consulting dermatologist, St. Joseph's Hospital, New York. Dr. Wise is a member of the Medical Society of the State of New York, Fellow of the American Medical Association; member and former presi-

dent of the American Dermatological Association, and a member of the Manhattan Dermatological Society and the New York Dermatological Society.

* * *

DR. HUGO ROESLER, Philadelphia, Pa., associate professor of radiology and cardiologist in the Department of Medicine, Temple University School of Medicine, will speak on "Hypertension" at the Fourth General Session, Thursday afternoon, May 12, at 4:15 o'clock.

A graduate of the University of Vienna in 1923, Dr. Roesler is a member of the staff of Temple University Hospital, and a member of the American Heart Association. He has made extensive studies of X-ray of the heart.

* * *

DR. GABRIEL TUCKER, Philadelphia, Pa., professor of bronchoscopy and laryngeal surgery, Graduate School of Medicine, University of Pennsylvania, and professor of clinical bronchoscopy and esophagoscopy, University of Pennsylvania School of Medicine, will address the session of the Section on Eye, Ear, Nose and Throat, Wednesday afternoon, May 11, at 4:45 o'clock, on the subject, "Cancer of the Larynx, Diagnosis and Treatment with Observations on the Relationship of Benign Tumors of the Larynx to Cancer".

A member of the Medical Society of the State of Pennsylvania and Fellow of the American Medical Association, Dr. Tucker graduated at Jefferson Medical College in 1905. He is a member of the American Laryngological Association; American Laryngological, Rhinological and Otological Society, Inc.; American Academy of Ophthalmology and Otolaryngology; American Bronchoscopic Society; and American Association for Thoracic Surgery. Dr. Tucker is bronchoscopist and laryngeal surgeon to the Graduate Hospital of the University of Pennsylvania, and various other hospitals in Philadelphia.

Attend Medical Fraternity Confab

Several Ohio physicians took a prominent part in the Twelfth Annual Medical Interfraternity Conference, held at the Palmer House, Chicago, February 13. Dr. Jonathan Forman, Columbus, and Dr. Ralph W. Elliott, Cleveland, representatives of Phi Rho Sigma, lead a discussion on "Problems of Chapters in Metropolitan Centers". Dr. Albert B. Landrum, Columbus, secretary-treasurer of Alpha Kappa Kappa, spoke on "Medical Dormitories and Chapter Life". Dr. R. C. Williams, Washington, D. C., known to many Ohio physicians for his work as medical director of the Farm Security Administration, represented Theta Kappa Psi, and led a discussion on "Stimulating Chapter Programs".

Regional Postgraduate Lectures Are Drawing Big Audiences Despite Conflicting Meetings and Floods

In spite of conflicting medical meetings and flooded highways, South-Central Ohio physicians are maintaining an active interest in the current series of Regional Postgraduate Lectures being presented by the Ohio State Medical Association, at the Elks' Home, Chillicothe.

On Thursday evening, March 3, which was also the opening day of the Ohio State University College of Medicine Postcollegiate Assembly at Columbus, 137 physicians heard two fine lectures at Chillicothe. Dr. John F. Beachler, Piqua, spoke on "Intestinal Obstruction", and Dr. James B. Nelson, Youngstown, discussed, "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment".

Flood waters left only two highways open into Chillicothe on March 17. Nevertheless registration at the postgraduate lecture that evening was 111. The program, lauded by those attended as one of the outstanding to date, consisted of the following discussions: "Tuberculosis in Infancy", by Dr. Edward A. Wagner, Cincinnati; and "Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. James G. Kramer, Akron.

As *The Journal* goes to press, the remainder of the course is as follows:

March 31—"Common Psychoses", by Dr. Charles W. Stone, Cleveland. "Cancer of the Breast", by Dr. Edward J. McCormick, Toledo.

April 14—"Prenatal and Postnatal Care", by Dr. Walter W. Brand, Toledo. "Infections of the Urinary Tract", by Dr. Thomas P. Shupe, Cleveland.

April 28—"Angina Pectoris and Coronary Thrombosis", by Dr. Frank C. Clifford, Toledo. "Fungous and Pyogenic Infections of the Skin", by Dr. Howard J. Parkhurst, Toledo.

May 19—"Arthritis: Medical Aspects", by Dr. H. B. Weiss, Cincinnati. "Arthritis: Orthopedic Aspects", by Dr. Joseph A. Freiberg, Cincinnati.

All meetings will be held at the Elks' Home, Chillicothe, and will start at 7:00 P. M.

Pathologists' Meeting on April 16

A meeting of the Ohio Society of Clinical and Laboratory Diagnosis will be held at the Institute of Pathology, Western Reserve University School of Medicine, Cleveland, Saturday, April 16. The program will be presented by Dr. Howard T. Karsner and members of his staff, in conjunction with local pathologists. Additional details concerning the meeting can be obtained by writing Dr. A. H. Schade, 320 Michigan St., Toledo, secretary of the Society.

HOBBY EXHIBIT ENTRY BLANK

The exhibition of "extra-curricular" activities at Dayton last year was so successful that more room has been assigned to hobbyists for the 1938 Ohio State Medical Association Annual Meeting, May 11 and 12, Neil House, Columbus. Three large rooms on the Mezzanine Floor of the Neil House will house the displays.

Arts and crafts always seem to top the entry list. Last year handmade Christmas cards, gun stocks, engine models, ship models, inlaid tables, glassware, paintings, etchings, photographs, and Indian relics were exhibited. This year we hope to branch out with a more varied and complete assortment. It doesn't matter to us **what** your hobby is as long as you **have** one. Bring along your "brain child" to show your fellow physicians from all over the state.

An entry blank is provided below. Fill it out and mail to the committee as soon as possible. We must know how to plan and arrange for the best possible display of individual exhibits.

Dr. Paul W. Palmer, Chairman,
Committee on Hobby Exhibits,
115 S. Grant Avenue,
Columbus, Ohio.

Please enter the following for exhibition at 1938 Annual Meeting, May 11-12:

Title and description_____

_____

I should have _____ sq. feet wall space ☐ floor space ☐ (check which).

Material will be best displayed on the wall ☐ table ☐ shelf ☐ showcase ☐. (Check).

Signed _____, M.D.

Address _____

Specialty, if any_____

Try to have all exhibits delivered to the committee on Mezzanine Floor of the Neil House by Tuesday evening, May 10. The committee reserves full authority to accept or reject any Exhibit. Space will be assigned in the order blanks are received.

ANNUAL REPORT OF THE COMMITTEE ON MEDICAL DEFENSE

SINCE the last report of the Committee on Medical Defense to the House of Delegates, the Medical Defense Plan of the Ohio State Medical Association has been discontinued by action of The Council following an announcement by two official committees of the American Bar Association that in their opinion the plan constituted the unauthorized practice of law on the part of the State Medical Association. (June, 1937, issue, *The Ohio State Medical Journal*, pages 655-658.)

Obviously, this action eliminated some of the important activities of this committee. However, the committee has continued, and will continue, to carry on a program of education and prevention among the membership.

One of the major activities of the Committee on Medical Defense always has been to keep the membership informed about the hazards of suits and threats of suits for alleged malpractice and to disseminate advice as to how such actions may be prevented. The committee has felt that the preventive aspect of its work has been just as important as was the medical defense plan itself —perhaps of greater importance so far as the membership as a whole is concerned. This activity should be continued by the State Medical Association. Efforts should be made to make such a program even more effective than it has been in the past.

The State Medical Association always should have some committee competent to inform members being sued for alleged malpractice where they may obtain competent expert witnesses; to advise members regarding the medical aspects of malpractice cases; to confer with the legal counsel of members being sued or threatened with suit on the medical aspects of litigation; and to retain counsel to appear as amicus curiae on behalf of the State Association in cases which may be pending in the courts where the legal questions involved are of general interest to all members of the Association.

With this in mind, the committee offers for the benefit of all members some recommendations and advice, based on the actual experiences of the committee over a period of years in dealing with malpractice questions and on information obtained from insurance companies, attorneys, and others, concerning malpractice litigation.

Indemnity Insurance—One large insurance carrier has conservatively estimated that the annual cost of malpractice claims and suits in the country exceeds $3,000,000. Statistics reveal that malpractice litigatiton is on the increase, having reached an "epidemic" stage in some localities. Obviously, therefore, it is vital that every physician should protect himself to meet this hazard.

Professional liability insurance is the most common method of obtaining protection. Physicians should deal only with indemnity companies of sound financial rating and good reputation. Policies should be checked carefully to see that they do not contain technical loopholes. If a physician when sued, is satisfied he is innocent of the charges, he should insist that the insurance company fight, not compromise. Notice of suit or threat should be given promptly by a physician to the proper representative of the insurance company. Close cooperation between the insurance company and the physician being sued is essential.

Insurance carriers have raised premium rates in some communities because of heavy losses and the increase in the number of suits in those localities. Anything which physicians as individuals and as a group can do to reduce the number of suits and threats for alleged malpractice will have a favorable reaction on premium rates. Some companies which write professional liability insurance are refusing to issue policies to physicians who do not belong to their local and state medical societies. This is one of many sound reasons why a physician should keep himself in good standing in medical organization.

We cannot over-emphasize the point that every physician runs the risk of a malpractice suit when he attends each and every patient. He must be prepared to defend himself and pay possible adverse judgments. As stated, professional liability insurance appears to be the best and most practical way of securing financial protection and legal defense. Incidentally, if he can, a physician does well to be judgment-proof; own nothing but his open accounts; have no funds, except small current checking account, and no estate in his own name.

Physician's Legal Duty and Responsibility—The rather common impression that a physician is legally obligated under all circumstances to attend the sick when called upon is erroneous. Although the physician may at times be under a moral obligation, he always has the legal right to elect whether or not he will accept employment in any given case.

However, if a physician accepts a case he is legally bound to continue service until, according to his best judgment, he decides that the patient is no longer in need of medical attention; until he is dismissed by the patient; or until he discharges himself after giving the patient reasonable notice of his intention so that the patient may arrange for other medical service. Of course these obligations may not apply if there is an expressed agreement between the physician and patient, "assuming that they have dealt with one another on the basis of such a contract as justice

and reason would dictate", as one authority has put it.

If planning a prolonged absence from his practice, a physician should properly notify his patients at the time they are actively under his care so that they may secure the services of another physician of their own choice or consent to having him arrange for such services during his absence. Even during temporary absences, it is advisable for a physician to arrange with some colleague to care for his patients in emergencies. In selecting a substitute, a physician should be certain that the substitute is competent and reliable.

The question of care and skill is most important. When a physician accepts a case he impliedly contracts to exercise that degree of care and skill customarily used by other physicians of that community under similar circumstances and conditions. If a physician holds himself out to be a specialist, the courts may expect him to exercise a greater degree of skill than is required of the general practitioner. The physician should be careful in giving proper instructions to his patients. He should not promise or guarantee results. Since a physician must meet certain standards of care and skill, he must keep abreast of medical progress by reading or by attending postgraduate courses and other meetings arranged by his medical societies.

Principal Causes of Suits and Threats—A large proportion of suits for alleged malpractice are without merit, i.e., without any substantial evidence of negligence or liability. Nevertheless, every suit harms the reputation of the individual physician and the medical profession as a whole. Also, it should be remembered that one suit, however unjust or flimsy, may start an epidemic of suits. Therefore, every physician should be interested in knowing the chief causes of most malpractice suits and threats so that he may take steps to avoid such pitfalls. Principal causes are as follows:

1. Thoughtless, ill-advised and unjustifiable criticism or disparaging remarks by a physician concerning some colleague.
2. Hope by dissatisfied patient and his attorney to profit.
3. Desire to injure the defendant's professional standing.
4. Criticism of physician by relatives or friends of patient.
5. Carelessness or negligence on the part of the physician; superficial examination and service.
6. Negligence on the part of assistants and attendants employed by physician.
7. Failure on the part of the patient or his family to carry out the physician's instructions and advice.

Preventive Measures—Some of the important points which a physician should keep in mind and follow to protect himself and minimize his chances of becoming the victim of a malpractice action are as follows:

1. Office assistants such as nurses, technicians, etc., should be carefully selected and should not be permitted to render services to patients without the physician's presence and supervision.

2. Every physician should keep complete and accurate case records.

3. X-ray pictures should be taken and carefully filed in all fracture cases, or where the nature of the injury indicates there might have been a fracture, if it is at all possible to secure an X-ray examination at the time of the injury or shortly thereafter.

4. Written consent from the patient who is to undergo an operation is desirable, though not necessarily essential. A written consent or written order from the properly constituted authority to perform an autopsy is necessary.

5. In cases where the physician recommends some particular method of treatment or procedure and the patient refuses to submit, the patient should be asked to sign a statement to that effect. Incidentally, agreements purporting to release the physician from liability for negligence, executed before treatment is commenced, are of little or no legal effect.

6. Every physician should guard against making derogatory remarks, deliberately or unintentionally, concerning a fellow practitioner, keeping in mind that his remarks may be used as the basis of a suit for alleged malpractice; that one malpractice suit may start an epidemic; and that he may be the next victim.

7. Suits to collect fees frequently precipitate malpractice actions, especially in instances where favorable results were not obtained or for any reason the patient is dissatisfied. Pressure to collect accounts should not be exerted until the statute of limitation (discussed later in this report) can be used as a defense in case of suit for alleged malpractice.

8. Physicians should have office equipment, especially electrical equipment, inspected periodically and modern safeguards installed. Faulty equipment has been the source of many malpractice suits. Do not leave the patient alone while undergoing mechanical treatment.

9. Containers for solutions used in office practice should be carefully marked and extreme care should be exercised in selection of the solution to be used. Use of a wrong solution may cause a disagreeable situation for a physician and a suit difficult to defend.

10. Use of unusual or not generally accepted procedures (experimental) is dangerous from a liability standpoint and should not be undertaken

unless the patient signs a statement acknowledging and assuming the risk.

The foregoing points are not all which could be cited. However, the committee believes that those listed are among the most essential factors in malpractice prophylaxis and should be kept in mind at all times by every physician.

Statutes of Limitations—It behooves every physician to keep himself informed on legislation and judicial decisions affecting the medical profession and medical practice. Efforts to provide this information for the profession are made by such publications as *The Journal of the American Medical Association* and our own *Ohio State Medical Journal.*

Laws of extreme importance to physicians are the so-called statutes of limitations which establish the time within which suits against physicians for alleged malpractice must be commenced to permit recovery.

The physician may be confronted with one of two classes of actions, namely: Causes of action based upon injuries which do not produce death and causes of action based on alleged wrongs which result in death.

In Ohio, ordinary malpractice actions, or actions for alleged injuries which do not produce death, must be commenced within one year from the time the relation between physician and patient terminated. An action for wrongful death must be brought within two years from the time of death. In the case of minors, the statute of limitation does not begin to run until the person has reached his or her majority. In other words, a child injured at the age of two years through the alleged negligence of a physician can maintain a malpractice action any time within one year after reaching his or her legal majority.

Conclusions—While unable to touch on all phases of this vital question, the committee has emphasized most of the essential factors. The medical profession must assume a definite responsibility in minimizing and discouraging malpractice threats and suits. If the individual physician does his best to guard against avoidable errors and mistakes, uses reasonable caution, skill and diligence, keeps himself abreast of medical progress, familiarizes himself with his legal responsibilities and obligations, avoids making derogatory comments about his fellow practitioners, and carries on his practice in an honest, conscientious manner, he may feel reasonably safe. At the same time he will be contributing much toward preserving the reputation of the entire medical profession and high standards of medical practice, thereby insuring the public of good medical care.

J. E. TUCKERMAN, M.D., *Cleveland, Chmn.*
WALTER H. SNYDER, M.D., *Toledo,*
F. P. ANZINGER, M.D., *Springfield.*

SPACE ON OHIO SPECIAL TRAIN SELLING AT LIVELY CLIP

Space on the Ohio State Medical Association Special Train to San Francisco and the A.M.A. meeting there next June has been selling briskly. Between 50 and 60 reservations have been made to date. Members interested (who wouldn't be) in this marvelous trip through the West at an exceedingly reasonable cost should not delay writing for accommodations. The itinerary, costs, etc., were published in the March, 1938, issue of The Journal. Plenty of first-class space is left but too long a delay might lead to disappointments. Write the Headquarters Office immediately.

Old Age Pension Expenditures

Ohio paid $28,013,281 in old age pensions in 1937, according to a recent report of the State Division of Aid for the Aged. Average monthly payments were $22.60 compared with $19.37 in 1936 and $15.14 in 1935. The average number of recipients rose to 103,286 in 1937 from 99,737 in 1936 and 85,669 in 1935. There were 29,835 new applicants in 1937 against 51,894 in 1936. The percentage of approvals gained from 22 to 27 per cent during the two years. The State recovered $228,190 from recipients last year of which $165,867 came from estates of deceased pensioners. The report disclosed expenditures of $555,640 for funerals and $1,069,670 for administration. Of the division's revenue in 1937, the State contributed $13,654,467, chiefly in liquor taxes and profits, and the Federal Government, $15,257,748.

Tri-State Medical Meeting

The annual meeting of The Northern Tri-State Medical Association, composed of physicians of Ohio, Indiana and Michigan, will be held at the Elks' Home, Findlay, Tuesday, April 12. The complete program for the all-day session was published in the March issue of *The Ohio State Medical Journal,* page 330. Dr. G. E. Jones, Lima, is president of the association and Dr. O. P. Klotz, Findlay, is a councilor. Local arrangements for the meeting are in charge of Dr. B. F. Mowry, Findlay, president of the Hancock County Medical Society.

AUDIT AND REPORT OF BOOKS OF THE OHIO STATE MEDICAL ASSOCIATION AND THE OHIO STATE MEDICAL JOURNAL FOR YEAR ENDED DECEMBER 31, 1937, BY KELLER, KIRSCHNER & MARTIN, CERTIFIED PUBLIC ACCOUNTANTS, COLUMBUS, OHIO.

THE ASSOCIATION

EXHIBIT A—Statement of Cash Receipts and Disbursements—Treasurer—for the year ended December 31, 1937

Cash on hand and on deposit at January 1, 1937		$ 667.63
Certificate of deposit		10,000.00
United States bonds		69,000.00
Total cash and bonds at Jan. 1, 1937		$ 79,667.63
RECEIPTS		
Membership dues, 1936	$ 45.00	
Membership dues, 1937	29,490.00	
Annual meeting	3,490.00	
Interest	2,498.69	
Total receipts		35,523.69
Total to be accounted for		$115,191.32
DISBURSEMENTS		
Ohio State Medical Journal	$11,000.00	
Executive Secretary—salary	5,600.00	
Executive Secretary—expense	636.38	
Assistant Executive Secretary—salary	4,200.00	
Assistant Executive Secretary—expense	247.90	
President's expense	40.85	
Treasurer's salary	300.00	
Council expense	589.04	
Council district subsidy	746.93	
Annual meeting	3,309.74	
Medical defense	3,765.59	
Committee on public relations	1,997.85	
Miscellaneous committee expense	1,163.78	
Stenographer—salary	1,200.00	
Stationery and supplies	651.29	
Postage and telegrams	1,160.68	
Auditing	100.00	
American Medical Association delegates	292.20	
Speakers bureau	94.20	
Employee bonds	20.00	
Industrial insurance	10.88	
Box rental and bank service charges	4.10	
Total disbursements		$ 37,131.41
Cash on deposit and bonds at December 31, 1937		78,059.91
Total accounted for		$115,191.32

EXHIBIT B—Statement of Cash and Bond Reconciliation—Treasurer—at December 31, 1937

The Huntington National Bank: Balance as shown by bank statement at December 31, 1937		$ 2,444.66
Less checks outstanding		384.75
Balance of cash as shown by books December 31, 1937		$ 2,059.91
Government bonds and certificates of deposit:		
U. S. Treasury bonds	$69,000.00	
Huntington Nat'l Bank, cert. of deposit	7,000.00	
Total bonds and certificates of deposit at December 31, 1937		76,000.00
Total balance as shown by books at December 31, 1937		$ 78,059.91

EXHIBIT C—Statement of Cash Reconciliation—Executive Secretary—at December 31, 1937

THE OHIO NATIONAL BANK—Executive Secretary account:		
Balance as shown by bank statement December 31, 1937		$ 13,206.00
OHIO STATE MEDICAL ASSOCIATION RECORDS:		
1938 dues deposited in 1937	$11,806.00	
1936 dues not transferred in 1937	30.00	
1938 exhibit collections	1,370.00	
Balance as shown by records December 31, 1937		$ 13,206.00

THE JOURNAL

FINANCIAL CONDITION

The financial condition of The Ohio State Medical Journal at December 1, 1937, (shown in detail in Exhibit A), was as follows:

Current assets		$ 1,916.90
Less current liabilities		50.25
Net current assets		$ 1,866.65
Property assets		2,149.65
Total net assets		$ 4,016.30
The above is represented by:		
Surplus		$ 4,016.30

EXHIBIT A—Balance Sheet at December 31, 1937

Current Assets		
Cash—The Ohio National Bank		$ 1,111.23
Cash—petty		10.00
Total cash		$ 1,121.23
Accounts receivable		795.67
Total current assets		$ 1,916.90
Property Assets		
Furniture and fixtures (depreciated value)		2,149.65
Total Assets		$ 4,066.55
Current Liabilities		
Subscriptions prepaid		$ 50.25
Surplus		
Surplus at December 31, 1936	$ 4,775.47	
Less expense in excess of revenue for the year ended Dec. 31, 1937	759.17	
Surplus at December 31, 1937		4,016.30
Total Liabilities and Surplus		$ 4,066.55

EXHIBIT B—Statement of Revenue and Expense for the year ended December 31, 1937

REVENUE		
Advertising		$ 12,335.54
Less: Commissions	$ 805.17	
Cash discount	358.98	
Total		1,164.15
Advertising—net		$ 11,171.39
Circulation		11,097.67
Bad debt collected		5.25
Total revenue		$ 22,274.31
Expenses		
Journal printing	$13,592.83	
Office salaries	5,000.00	
Rent	1,500.00	
Journal Postage	706.23	
Telephone and telegraph	403.88	
Illustrations and engravings	373.89	
Depreciation	231.08	
Bad debts	60.00	
Office supplies and expense	306.30	
News clipping service	88.00	
Stencils and mimeograph supplies	114.28	
Dues and subscriptions	63.45	
Journal envelopes	541.50	
Postage and express	11.85	
Miscellaneous expense	40.19	
Total expenses		23,033.48
Expense in excess of revenue for the year ended Dec. 31, 1937		$ 759.17

SCHEDULE 1—Statement of Cash Reconciliation at December 31, 1937.

THE OHIO NATIONAL BANK		
Balance as shown by bank statement December 31, 1937		$ 1,113.48
Less: Outstanding check		2.25
Balance as shown by books at December 31, 1937		$ 1,121.23

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activitics

Death and taxes are certainties. Both are something for the physician to think about—the former because he is a scientist; the latter because he is a taxpayer.

Potential Dangers of Move to Repeal Sales Tax Laws

The following comments deal with taxes — perhaps it would be more correct to say: potential taxes. They refer to an actual situation confronting the taxpayers of Ohio—a situation which dare not be treated lightly. In our opinion, this situation is of direct importance to every physician. It is hoped all readers of *The Journal* will analyze the facts presented and act accordingly.

For the sake of brevity, a bulletin prepared by the Committee on Public Relations and Economics of the State Medical Association and mailed to presidents, secretaries and legislative committeemen of all component medical societies is quoted, in which the situation referred to is described:

EFFECTS OF MOVE TO AMEND OHIO CONSTITUTION TO REPEAL SALES TAX

"Petitions are being circulated throughout Ohio to obtain signatures of electors to a proposal to amend the Ohio Constitution so that no excise tax may be levied on the sale or purchase of any goods or commodities, except fuel for motor vehicles.

"If sufficient signatures to the initiative petition are secured, the proposal will be placed on the ballot at the November general election. If the proposed amendment should be finally approved by vote of the people at that time, it will mean that the taxes levied at present on sales of tangible personal property (the so-called coupon sales tax), cigarettes, liquid fuel, beer, malt beverages, malt and wine, may no longer be levied. The amendment might even prohibit the excise tax on the gross receipts or gross earnings of public utilities.

"**What Would Be the Effect of such an Amendment?**— If the proposed amendment gets on the ballot and is adopted, the loss in revenues to the public schools, cities, villages, counties and townships and for poor relief would be from $70,000,000 to $90,000,000 annually. Essential governmental functions would be crippled. Schools would be confronted with a crisis. There would be little, if any, money for poor relief.

"**New Taxes Would Have to be Enacted**—To take the place of this huge loss of revenue, new taxes would have to be enacted. A few of the possible sources of revenue and new taxes which undoubtedly would be proposed are:

"An occupational or professional tax or both.

"Tax on business, personal and professional services.

"Personal income tax.

"Gross receipts tax.

"Large increases in the taxes levied on tangible personal property.

"Increase in the intangible personal property taxes.

"Payroll taxes.

"Restoration of tangible personal property such as household goods, motor vehicles, etc., to the tax duplicate.

"Heavier real estate taxes through increases in the assessed value of property.

"What Can or Should Be Done by Physicians?—The purpose of this bulletin is to inform the members of the Ohio State Medical Association of this situation and its possible effects. What physicians can or should do is something which each physician will have to decide for himself. All physicians are taxpayers. Therefore they should be interested in this subject. After reading the above facts, if a physician is convinced that it would be unwise to tinker with the present taxation system through constitutional amendments and feels that taxes which would have to be levied to replace revenue lost through repeal of the sales tax would be undesirable and obnoxious, he should do two things: **(1) Refuse to sign the petition referred to above; (2) Advise his friends not to sign the petition."**

Propaganda is at once the principal weapon and curse of our age.—Arthur Bryant.

To the scheduled discussants on the 1938 Annual Meeting program, especially, the following editorial comment pilfered from the *Wisconsin Medical Journal* is dedicated but in a general way it should be absorbed by all physicians since at some time or another every physician becomes a discussant, formal or informal:

Discussion About Discussants and Their Discussions

"Mark Twain once said that everyone talks about the weather but no one ever does anything about it. We were reminded of this recently

when several attending a large medical meeting started discussing the average discussant.

"Why is it, they asked, that discussants so often do not discuss? Frequently a discussant will make no reference to the speaker's contribution, other than perhaps a complimentary one, but will present what amounts to a supplementary paper. Everyone was in accord that the matter was one that should be remedied—possibly because of a glaring example still fresh in mind.

"There is something to be said for us discussants who ask for a copy of the paper we are to discuss and fail to receive it. But when we do receive the paper, let us confine our remarks to the contribution and really discuss it."

The expectations of life depend upon diligence. The mechanic who would perfect his work must first sharpen his tools.—Confucius.

Regional Lectures Are Friend-Makers for the Profession

Captioned "The Men of Medicine Go To School", the *Chillicothe Advertiser* in a recent issue commented as follows on the Regional Postgraduate Lectures being presented by the State Association in that city:

"Never too old to learn is apparently the motto of all of Chillicothe's physicians, judging from the interest and attendance in the series of lectures which is being sponsored here by the Ohio State Medical Association.

"Chillicothe, however, did not need this display on the part of her men of medicine to convince her that she was fortunate in the doctors within her city. The physicians here have always been alert and quick to test and accept or reject the latest developments in their science of healing, their acceptance depending on the practicality of the new suggestions.

"We congratulate them on their willingness to spend an entire evening listening to lectures which are purely scientific and designed for no pleasure except that of greater knowledge."

The above is typical of complimentary references which have been made by other newspapers in sections of the state where the meetings have been held. The lectures have thereby become valuable from a public relations standpoint, all of which the medical profession can use to good advantage at this particular time.

Officials of the State Association who are responsible for the inauguration of the Regional Postgraduate Lectures are very much gratified with the success of the project to date. The attendance at the Northwestern series in Findlay and Defiance and at the South-Central meetings in Chillicothe has been exceptionally fine. Chairmen in the host cities and their committees have given the fullest cooperation in handling local arrangements. Many of the lecturers have appeared on the program at a great personal sacrifice. Most of the talks have been very practical and consequently worthwhile. The whole project shows signs of developing into a statewide postgraduate program which will be of great value to all members of the Ohio State Medical Association.

Medicine without ideals and without ethics ceases to be a profession.—Irvin Abell, M.D., President-Elect, American Medical Association.

Technical Exhibitors Deserve Support of All Members

It is hoped that every member will review the list of firms scheduled to exhibit at the Ninety-Second Annual Meeting in Columbus in May before he finishes reading this issue of *The Journal*. The list will be found on page 459.

All signs indicate that the Technical Exhibit at the Columbus meeting will be one of the best ever presented at an Annual Meeting of the State Association. There Ohio physicians will find many old, as well as new friends.

Members attending the Columbus meeting should make it a point to visit each booth. The exhibitors will be glad to show their wares and to be of service in other ways. Because they have been admitted to the Technical Exhibit is a guarantee that they rank as A No. 1 and that the products being displayed are council-approved. Firms in the Technical Exhibit deserve the support of members of the Ohio State Medical Association as they are helping, financially and otherwise, to make the 1938 Annual Meeting a real meeting.

Responsibilities gravitate to the person who shoulders them, and power flows to the man who knows how.—Elbert Hubbard.

Two Jobs Well-Done Win This Month's "Flowers for Living"

This month's award of "flowers for the living" for a job well-done goes jointly to the officers of the Sixth Councilor District and those who planned and staged the postcollegiate clinical assembly at the College of Medicine, Ohio State University.

The recent Sixth District meeting at Youngstown was a distinct success. The attendance was excellent. The program on industrial accidents and diseases and fractures was outstanding. It was the kind of district meeting which appeals especially to the man in general practice since it gave the G.P. something which he can use in everyday practice. Our hats off to Councilor Skipp, Sixth District President McConkey, Secretary Van Dyke (John M.) and the program com-

mittee of the Mahoning County Medical Society which assisted in arranging part of the program!

An exceptionally fine piece of postgraduate education was the clinical assembly held early in March at the College of Medicine, Ohio State University. The program seemingly overlooked nothing. There was a record attendance. The 1938 assembly established the College of Medicine at Ohio State University as one of the leaders in the field of postgraduate education. We bow to the arrangers: Drs. Russel G. Means, Jonathan Forman (he didn't write this), Charles A. Doan, I. B. Harris, N. Paul Hudson, Verne A. Dodd and H. M. Platter.

If all our misfortunes were laid in one common heap, whence everyone must take an equal portion, most people would be contented to take their own and depart.—Socrates.

Keystone Philosopher Takes Inventory of Medical Conventions

Inasmuch as many Ohio physicians are planning to be in Columbus for the Ninety-Second Annual Meeting of the Ohio State Medical Association, May 11 and 12, the following advice which appeared in a recent issue of our esteemed contemporary in Pennsylvania seems quite apropos:

"Medical conventions are notable for the get-together of the members of the medical profession. Among these members are found all types of personalities. The officers are busy people, affable and friendly, or they would never have become officers. The chairmen of program and entertainment committees are also busy people. Those who are to present papers are sober, serious, and under considerable tension, both before the presentation and after. Before the time arrives to give their papers, they wonder how many will be present to hear the magnus opus. After the event, they are concerned as to what the gathering thinks of them. Candidates for office and their friends have a duty to perform; they have pledged themselves to see this one and that one.

"With due respect to all of these, one of the most delightful personalities to be met is that individual, who, calm and relaxed, wanders hither and thither about the convention. When you greet him, he has come from nowhere in particular and is going nowhere in particular, just wandering around. He always has time for a handshake; makes inquiries about the family; says you are looking well; never tires you with some long irrelevant incident; and is going nowhere in particular. Therefore, he will join you in your stroll through the exhibits; will listen to a paper with you in which there is mutual interest; will smoke with you; or take a walk with you—for he is going nowhere in particular. And yet, when the meeting is over, he has shaken hands with a large number at the convention; has culled out and listened to the "meat" of the program; arrives home with a stomach in good condition; and, on his return to work, feels much relaxed and enters his routine with renewed pep and vigor.

"The man who has come from nowhere in particular and is going nowhere in particular, at the convention, is one that many might emulate to personal advantage. When the hurly-burly is over, men wonder what it was all about. They spend sleepless nights at the meeting and return home tired and fatigued, and with indigestion. They promise themselves to 'read the papers in the journals.' They would do well to slow down, relax, enjoy themselves in wholesome pursuits, and carry back with them the nuggets as does the man at the convention who is going nowhere in particular."

EARLY BIRDS TO GET CHOICE HOTEL ROOMS; MAKE RESERVATIONS NOW

Hotel reservations in Columbus at the time of the 1938 Annual Meeting, May 11 and 12, should be made immediately. Use the blank printed elsewhere in this issue. Columbus is a great convention city and hotel rooms always are in demand. It will be first-come, first-served. Therefore, physicians should make applications for rooms at once. Don't let this scare you away from the meeting. Hotel accommodations will be available but choice rooms, of course, will go to those who make early reservations.

Hospital Association Meeting

The annual meeting of the Ohio Hospital Association will be held at the Deshler-Wallick Hotel, Columbus, April 5, 6 and 7. Affiliated organizations scheduled to meet at the same time are: Ohio Dietetic Association; Ohio Association of Record Librarians; Ohio Association of Nurse Anesthetists; Hospital Obstetric Society of Ohio; Ohio Society of Medical Technologists and the Ohio Chapter of the American Physiotherapy Association.

Speakers include: Dr. H. L. Rockwood and Dr. G. S. Woods, Cleveland; Dr. M. F. Steele, Columbus; Dr. Benjamin S. Kline, Cleveland; Dr. J. Fremont Bateman and Dr. Nicholas Michaels, Columbus; Dr. Waldo E. Nelson, Cincinnati; Dr. A. J. Skeel; Cleveland; Dr. R. S. Fidler, Columbus; Dr. A. E. Brant and Dr. F. W. McNamara, Youngstown; Dr. R. A. Ramsey, Dr. Harrison S. Evans, Dr. Judson D. Wilson, Dr. Philip T. Knies, Columbus; Dr. John LoCricchio, Lima; Dr. James B. Rucker, Toledo.

Do You Know - - -

Membership in the Ohio State Medical Association on March 18 was 5,510 compared with 5,192 on the same date last year, and 5,944 on December 31, 1937.

* * *

Dr. E. E. Bushong, superintendent of the Lima State Hospital and Dr. Guy H. Williams, superintendent of the Cleveland State Hospital, recently exchanged positions in accordance with an order of the State Department of Welfare.

* * *

Friends of Dr. James Benjamin Dougherty, Canton, who died January 22, 1937, have formed a committee to raise funds to build and equip a pathological laboratory at Aultman Hospital in his memory.

* * *

Dr. Harold N. Cole, Cleveland, was recently reappointed to membership on the Council on Pharmacy and Chemistry of the American Medical Association.

* * *

A cooperative study of the relative qualities of examinations for venereal disease is being made by Cleveland laboratories, under the auspices of a joint committee of the Cleveland Academy of Medicine and the Cleveland Health Council on Venereal Disease.

* * *

Dr. Carl K. Kirchmaier, Cincinnati, has been named medical director of the Columbia Life Insurance Company, succeeding the late Dr. Frank B. Cross.

* * *

According to the U. S. Department of Education, figured on a basis of an average school year of 180 days, Ohio children averaged an attendance of 166 days in 1936, the highest of any state in the Union, and compared to New York, 162 days; Michigan, Wisconsin and Maryland, 159, and Pennsylvania, New Jersey and Connecticut, 158.

* * *

The Hempstead Academy of Medicine, Portsmouth, has launched an educational campaign against illicit use of narcotic drugs in Scioto County.

* * *

The Columbus Ophthalmological and Otolaryngological Society has requested the Franklin County prosecutor to investigate optical advertising in Columbus newspapers.

* * *

Dr. C. M. Peterson, formerly a member of the staff of the Council on Medical Education and Hospitals of the A.M.A., has been appointed secretary of the newly established Council on Industrial Health.

Dr. Pauline Zinninger, Canton, is the new editor of the Bulletin of the Stark County Medical Society.

* * *

An interesting report on "Developments in Workmen's Compensation Since 1930" by the Bureau of Medical Economics of the American Medical Association, appeared in the organization section of *The Journal of the A.M.A.*, February 26, March 5 and March 12 issues.

* * *

Fatal accidents in Ohio were responsible for 720 deaths among children under 15 years of age during 1937. Of these 32 per cent were killed in the home, and 56 per cent of the deaths in the home were the result of accidental burns.

* * *

Dr. A. William Leschoier recently was elected president of Parke, Davis & Company. Since graduation from the Detroit College of Medicine in 1909, he has been a member of the Parke-Davis research staff, assistant director of the Research and Biological Laboratories, director of the Department of Experimental Medicine, assistant-to-the-president and, since 1929, general manager.

* * *

Dr. Joseph F. McCarthy has been appointed professor of urology and attending urologist to the New York Polyclinic Medical School and Hospital.

* * *

Substantiation of the claim that a compulsory health insurance system providing cash benefits during disability fosters malingering is revealed in a recent report of the Department of Health for Scotland. The average period of incapacity per insured person during the fiscal year 1935-36 was 11.45 days, an increase of 5.3 per cent over 1934-35, and exceeding the five-year average for 1930-35 by 14.7 per cent.

* * *

According to a statistical bulletin of the Metropolitan Life Insurance Company, out of the 39 common causes of death, 27 show a relatively heavier toll among males than among females. Among them are alcoholism; deaths from homicide, suicide and accidents, syphilis, cardiovascular renal disease, pneumonia, tuberculosis, appendicitis, influenza. Only eight causes exhibit an excess mortality among women namely, cancer, intestinal obstruction, exophthalmic goiter, and conditions incident to the puerperal state.

* * *

In a poll conducted by the American Institute of Public Opinion nine out of every ten persons throughout the nation voted that each state should require physicians to test pregnant mothers for syphilis.

IN MEMORIAM

James H. Bennett, M.D., Youngstown; Western Reserve University School of Medicine, Cleveland, 1887; aged 79; former member of the Ohio State Medical Association and the American Medical Association; died March 2. Dr. Bennett retired because of ill health 19 years ago, after having practiced in Youngstown for 32 years. For 15 years he served as a member and president of the local board of education. When Bennett School was built, one of the most modern in the Mahoning Valley, it was named for Dr. Bennett, one of the few occasions when a public building in Youngstown has been named for a living person. He was a member of the Knights of Pythias, the Masonic Order and the Presbyterian Church. Surviving are his widow, a daughter and two sons, one of whom is Dr. Wendell H. Bennett, Youngstown.

Mary Caroline Mackin Browning, M.D., Cortland; Women's Medical College of Pennsylvania, Philadelphia, 1925; member of the Ohio State Medical Association and Fellow of the American Medical Association; died February 18. Dr. Browning practiced in Canton for five years and in Cortland for five years. She was a member of the Seventh Day Adventist Church. Surviving are two daughters, one of whom is Dr. Zelma MacKillip, Cortland; one sister and three brothers.

Robert W. Chalfant, M.D., Bellefontaine; Eclectic Medical College, Cincinnati, 1882; aged 85; died March 1. Dr. Chalfant had retired, after practicing in Bellefontaine for nearly 50 years. Two sisters and a brother survive.

Louis Henry Cisler, M.D., Marietta; University of Pennsylvania School of Medicine, Philadelphia, 1895; aged 67; died February 14; Dr. Cisler's death followed an extended period of invalidism. He had practiced in Marietta for many years. His widow, a son, two daughters, a sister and two brothers survive.

Donald Eugene Harris, M.D., Los Angeles, California; Medical College of Ohio, Cincinnati, 1902; aged 60; died February 18. A native of Kenton, Dr. Harris settled in California shortly after graduation, and continued in practice there until his death.

Jasper William Jolley, M.D., Marion; Starling Medical College, Columbus, 1905; aged 58; member of the Ohio State Medical Association and the American Medical Association; died February 13. Dr. Jolley began the practice of medine at Morral. During the World War he was a lieutenant in the Medial Corps of the U. S. Army. Dr. Jolley was a member of the American Legion. He had practiced in Marion since 1919. Surviving are his widow, his father, two sisters and four brothers, one of whom is Dr. Roy F. Jolley, Akron.

Edgar J. March, M.D., Canton; College of Physicians and Surgeons of Baltimore, Md., 1884; aged 80; member of the Ohio State Medical Association and Fellow of the American Medical Association; died February 20. Dr. March was Canton's oldest physician, both in length of service and age. He had been in active practice for 54 years, of which 52 years had been spent in Canton following two years in Holmes County. For many years Dr. March was president of the staff of Aultman Hospital, and on the occasion of his 50th anniversary in the practice of medicine, March 8, 1934, was guest of honor at a dinner given by members of the hospital staff. He had also received the Masonic Gold Medal in honor of his membership of 50 years in that order. From 1915 to 1921, Dr. March was Councilor of the Sixth District of the Ohio State Medical Association. He was a member of the Canton Medical Library Association. Surviving are his widow, a son, a sister—Dr. Julia March Baird, and three brothers, two of whom are physicians, Dr. Harter W. March, Canton, and Dr. Harry A. March, New York City.

John F. O'Brien, M.D., Canton, Baltimore University School of Medicine, 1898; aged 63; died March 7. Dr. O'Brien first practiced in Battle Creek, Michigan, for two years, and later moved to Canton. He was formerly a member of the staff of Mercy Hospital, Canton. Dr. O'Brien was a member of the Catholic Church. His widow, two brothers and a sister survive.

Pringle George Tait, M.D., Toledo; University of Michigan Medical School, Ann Arbor, Mich., 1900; aged 62; member of the Ohio State Medical Association and Fellow of the American Medical Association; died February 16. Dr. Tait had practiced in Toledo for 37 years. During the World War he was a lieutenant in the Medical Corps of the U. S. Army. He was a member of the staff of Women's and Children's Hospital, and staff member and co-director of neurology at St. Vincent's Hospital. Dr. Tait was a member of the Presbyterian Church, the American Legion, and the Masonic Order. Three sisters and a brother survive.

Harvey Shephard Thatcher, M.D., Little Rock, Arkansas; Rush Medical College, Chicago, 1917, aged 53; member of the Arkansas Medical Society, and Fellow of the American Medical Association; died January 20. Dr. Thatcher had

been professor of pathology of the University of Arkansas School of Medicine since 1926. A native of Utica, Licking County, he was pathologist at Lakeside Hospital, Cleveland, for several years, during which time he was a member of the Ohio State Medical Association. Dr. Thatcher was a Councilor of the Southern Medical Association. His widow survives.

William E. Wells, M.D., Cleveland; Cleveland University of Medicine and Surgery, 1885; aged 77; died February 6. Dr. Wells' death followed several years of failing health. He had been associated with Huron Road Hospital, Cleveland, for many years. His widow and a brother survive.

Meeting of Industrial Surgeons

The Twenty-Third Annual Meeting of the Association of Industrial Physicians and Surgeons will be held concurrently with the Second Annual Midwest Conference on Occupational Diseases at the Palmer House, Chicago, June 6-9. All physicians are cordially invited to attend. Objectives of the meeting are to broaden the interest in industrial medicine to the end of minimizing the morbidity and mortality of working people, reducing accidents and the number of deaths or cripples resulting therefrom, removing the hazards of occupational diseases and keeping more people on jobs in healthy condition. Dr. Clarence D. Selby, medical consultant for the General Motors Corporation, Detroit, Michigan, and former president of the Ohio State Medical Association, is president-elect of the Association of Industrial Physicians and Surgeons.

Dr. Doull Attends Leprosy Congress

Dr. James A. Doull, Cleveland, professor of hygiene and public health, Western Reserve University School of Medicine, and member of the Sub-Committee on Public Health of the Ohio State Medical Association, represented the University, the College of Physicians and Surgeons of Philadelphia and the Medical Advisory Board of the American Leprosy Foundation, at the International Leprosy Congress in Cairo, Egypt, March 21-28. He addressed the Congress on the importance of field investigations of leprosy. Dr. Doull also will visit research and medical institutions in Palestine, Italy, France and England.

Named To Child Hygiene Staff

Dr. Eugene Mankovich, Cleveland, has been appointed to the staff of the Bureau of Child Hygiene, State Department of Health, as a pediatrician. He graduated in 1923 from the Univerzita Komenského Fakulta Lekárska, Bratislava, Czechoslovakia, and has practiced in Cleveland for the past 12 years.

State Laboratory To Make Kline, Kahn Tests Unless Wassermann Asked

The following announcement has been made by the State Department of Health relative to changes in serological methods and reports on specimens examined for syphilis by the Division of Laboratories:

"As a result of an extraordinary increase of blood specimens being received at the State Department of Health Laboratory for syphilis examination, it is found expedient to replace the Wassermann (Kolmer) system with Kline's test. Accordingly two flocculation procedures, Kahn and Kline, will be applied on all blood or spinal fluid specimens received, provided sufficient material is furnished for the combined tests. Clinicians who desire a Wassermann check on any particular case may have this test performed by making a special request on cards accompanying the specimen. It should be understood in such cases reports may be delayed somewhat.

"Also, in conformity with a recommendation made by the Committee on The Evaluation of Serodiagnostic Tests for Syphilis, a change of nomenclature on report forms is being made. Instead of writing symbols to denote the degree of positiveness, the terms 'Positive,' 'Doubtful', 'Negative' and 'Unsatisfactory' are to be utilized. Briefly, when a specimen is reported 'positive' it means a reading of 2, 3, or 4 plus was recorded; while 1 plus, or plus-minus will be reported as a 'Doubtful' reaction".

Research Award Announced

The Executive Council of the Association of Military Surgeons of the United States has announced that the Sir Henry S. Wellcome Medal and Prize for 1938 will be awarded for the research work most valuable for the military service performed in any branch of medicine, surgery, or sanitation by any one eligible for membership in the Association, report of which is submitted in competition for the prize and has not been previously submitted for publication. The award will be a gold medal and a cash prize of $500. Additional information concerning the competition can be obtained by writing the Secretary of the Association, Army Medical Museum, Washington, D. C.

Goiter Conference in the Fall

Dr. Allen Graham, Cleveland, chairman of the Program Committee of the American Association for the Study of Goiter, has announced that the Third International Goiter Conference will be held in Washington, D. C., September 12-14, 1938. Physicians desiring to participate in the program are requested to submit titles to Dr. Graham, 2020 East 93rd St., Cleveland.

THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

Failure of the Heart and Circulation—Terence East, London, England. John Bale, Sons and Curnow, Ltd. 2 shillings, 6 pence.

Not since Paul D. White's classical St. Cyres Lecture on Chronic Constrictive Pericarditis delivered at the National Hospital for Diseases of the Heart, London, July 10, 1935, and printed in The Lancet, September 7th (P. 539) and 14th (P. 597), 1935, has the reviewer read such an excellent monograph in English, relating to the cardio-vascular system. Summarizing as it does practically every important contribution to the physiology, physical diagnosis, and treatment, of heart failure, it is a little book of 129 pages which should be in the library of every specialist, general practitioner and student of heart disease. Anglicisms such as "screening" for fluoroscopy, "pudding or sweet" for dessert, and dosages of "half a minim per stone" only add to one's delight in reading. If one must find some fault it is in the fact that there is no bibliography, although the author's acquaintance with the literature is gladly assumed.—R. C. Kirk, M.D.

The Human Mind. By Karl A. Menninger, M.D. Second Edition, $3.75. Alfred A. Knopf, Inc., New York, 1937; pp. 504.

Menninger's popular book, "The Human Mind", has been republished in a revised edition. Its material is well chosen; its perspective broad, and its viewpoint healthy. In lucid and readable language, aided by sketches and richly exemplified by excerpts from case histories, it presents this intangible subject in an unusually clear manner.

The book is divided into six main chapters. The first is brief and introductory. The second dealing with "Personalities" is a masterful delineation. The third chapter describes and explains "Symptoms". The fourth, entitled "Motives", epitomizes the dynamic theories of Freud understandingly. The fifth chapter entitled "Treatment" should appeal to the practicing physician, while the last chapter reviews "Applicatons" and should be of general interest. An up-to-date bibliography and an index complete the book.

A strong feature of "The Human Mind" is its objectivity. It presents the ethereal, intangible mysteries of the mind in an orderly, concrete manner. The reader is aided by the systematic presentation of the material, the subdivisions, and especially by the many practical analogies which translate vague, unknown theories into familiar concepts. Numerous quotations and well chosen references from the literature are interspersed with the text.

The defects are minimal and perhaps inevitable in the attempt to cover such a wide subject. From the standpoint of the practitioner, the subject of the neuroses is too briefly discussed. Its importance might justify a separate chapter. Also, there is a brevity to certain case histories and a tendency to change from subject to subject, when the reader might have been benefited by a more complete analysis of one item. However, to continue mentioning flaws in so splendid a book, is like calling attention to a microscopic blemish on a beautiful face. The book like its author is practical, brilliant, and dynamic, even if a bit jumpy.

"The Human Mind" is highly recommended to students, practitioners, and to interested lay readers.—J. L. Fetterman, M.D.

Health Insurance—The Next Step in Social Security. By Louis S. Reed, one-time member of the research staff of the Committee on the Cost of Medical Care. $3.00. Harper and Brothers, New York, 1937; pp. 281.

The thesis of this contribution to this decidedly controversial topic is that it is the responsibility of the community to see that every one should have "adequate" medical care, preventive and curative, irrespective of whether the individual happens to have the purchase price; that this concept is but an extension of the poor law system of England in which in the seventeenth century it was set forth that no one shall be permitted to die for lack of food and then on to the time when in this country the community assumed the responsibility of providing a certain minimum of education for all, on to the establishment of old age pensions to insure that all persons over 65 shall have the wherewithal for a decent living; that now since we have unemployment insurance and a consciousness of a minimum wage, as a community we are now ready to assume responsibility for the health of all. "Government alone is capable of bringing order" into the field. Hence such insurance must be compulsory. The author in persuading exposition of his thesis thinks that such a program can be financed by (1) a tax of 2 per cent upon the earnings of all employes other than those engaged in agriculture and domestic service; who earn less than $3,000 per year; (2) the amount raised by the federal payroll tax of 1.5 per cent and returned to the state; and (3) a contribution from the state

treasury equal to one-quarter or a fifth of the aggregate raised from the above two sources. All physicians would do well to read this clear cut statement of the opposition, so that they may intelligently join "sane Americans who are alarmed about Pollyannas busy with anathema against existing social evils."

Emotional Adjustment in Marriage. By LeMon Clark, M.D. $3.00. C. V. Mosby Company, St. Louis, 1937; pp. 261.

The author is unusually well fitted to write this book and he has succeeded in presenting in a readable manner the important facts. In a realistic way, he has set forth the facts which are necessary for an understanding of this problem so vital to society. His realism may offend an older person now and then but his book is going to help all who read it.

Dentifrices and Tooth Brushes. By Edward M. Andres. 25 cents. Phoenix Junior College Press, Phoenix, Arizona, 1937; pamphlet, pp. 31.

A consumer's guide on these important articles of toilet. Recommended.

The Adventures of Jimmy Microbe. By Virginia Budd Jacobsen and Lyman L. Daines, M.D., dean, School of Medicine in the University of Utah. $1.00. The Reilly and Lee Company, Chicago, 1937; pp. 91.

A clever child's book successfully teaching the tots why mother says, "don't touch that" or "don't put your finger in your mouth." The fundamental principles of pathogenic bacteriology are told so interestingly that a child can't help but realize them and remember them. This with proper instruction should make their understanding easy.

Treatment in General Practice. By Harry Beckman, M.D., professor of pharmacology at Marquette University. Third edition, revised and entirely reset. $10.00. W. B. Saunders Company, Philadelphia, Pa., 1938; pp. 787.

The universal acceptance of the two previous editions insures a popular demand among physicians for this one. It is complete in its coverage from abortion to yellow fever. It is highly recommended for the shelf of every physician.

Doctors on Horseback. By James Thomas Flexner. $2.75. Viking Press, New York, 1937; pp. 369.

Well told biographies of John Morgan, Benjamin Rush, Ephriam McDowell, Daniel Drake, William Beaumont, Crawford W. Long and Wm. T. G. Morton. With these the author has painted a fascinating picture of American medicine from 1770 to the war between the states.

The Romance of Russian Medicine. By Michael L. Ravitch, M.D. $3.00. Liveright Publishing Corporation, New York, 1937; pp. 352.

While the author displays such a great enthusiasm for Soviet medicine that to the average reader the book reads like pure propaganda, still it is a most readable book showing how a socialistic state attempts to solve some of its medical problems. It is to be hoped, however, that it be taken for just that and not lead anyone to support the idea that socialistic medicine can be engrafted on a democracy.

Milestones In Medicine. Laity Lectures of the New York Academy of Medicine. $2.00. D. Appleton-Century Company, New York, 1938; pp. 276.

This second series of lectures emphasize the difference between knowing and understanding the development of our Science. The contributors are Drs. Smith Ely Jelliffe, Charles R. Stockdale, Karl Vogel, Frederick Tilney, Henry E. Sigerist, Newton E. Wayson, and Walter Timme. How perfectly the purpose has been accomplished can easily be seen in reading these most instructive lectures. The book is highly recommended for students of medical history and progress, as well as medical and general libraries.

The 1937 Yearbook of Dermatology and Syphilology. Edited by Fred Wise, M.D., and Marion B. Sulzberger, M.D. $3.00. The Year Book Publishers, Chicago, 1938; pp. 736.

This extraordinary, complete review of the developments in these fields has maintained its previous high standards. The reviewer knows of no better summary of the progress on allergy, dermatology and syphilis. Many of us have come to look forward with keen anticipation for the practical essay with which the editor always begins this volume. This year the subject is "The Modern Treatment of Common Fungus Affections (Ringworm, Tinea)—A Guide for the General Practitioner". This alone is worth the price of the book to anyone doing general medicine.

My Scrapbook of Medicine. By Louis R. Effler, M.D., Toledo, Ohio. Privately printed, 1937; pp. 248.

The author, a frequent contributor to *The Journal*, has collected into one volume in pithy paragraphs a great deal of medical history which makes most entertaining and instructive reading.

The Practical Book of Building "The House of Health". By Odd Albert, C.E., M.S. Second edition. $1.29. Garden City Publishing Co., Inc., Garden City, New York, 1937; pp. 128.

This is a handbook for every one interested in a home—on how to finance, to build and to equip. Since most physicians belong to this group, each of us will be repaid many fold to own and study this book.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: PARKE G. SMITH, M.D., CINCINNATI)

BUTLER

The motion picture "Diagnosis and Treatment of Syphilis", produced jointly by the American Medical Association and the U. S. Public Health Service, was presented by Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, at a meeting of the Butler County Medical Society, Thursday afternoon, February 24, at the Nurses' Home, Mercy Hospital, Hamilton.—Mildred White Gardiner, M.D., secretary.

CLINTON

Dr. L. E. Snyder, Blanchester, spoke on "The History and Technique in Valuation of Tuberculin Tests", at a meeting of the Clinton County Medical Society, Tuesday, March 1, at the General Denver Hotel, Wilmington.—News clipping.

HAMILTON

The following programs were presented by the Academy of Medicine of Cincinnati during March:

March 1—Report of the Joint Committee on Appendicitis, by Dr. Lloyd B. Johnston; "Closed Intrapleural Pneumonolysis In the Treatment of Pulmonary Tuberculosis", by Dr. J. N. Christiansen; "Notes on the Psychopathology of Suspicions of Marital Infidelity", by Dr. Maurice Levine, with discussion by Dr. Louis A. Lurie.

March 8—"Hypotension and Hypertension", by Dr. Alfred Blalock, associate professor of surgery, School of Medicine, Vanderbilt University, Nashville, Tenn.

March 15—"Migraine and Epilepsy—Newer Concepts and Management", by Dr. William G. Lennox, assistant professor of neurology, Harvard Medical School, Boston, Mass.

March 22—"Spontaneous Rupture of the Esophagus", by Dr. Clinton V. Ervin, Jr., and Dr. Alois Moore; "Pertinent Questions Pertaining to the Nasal Sinus Problem", by Dr. William Mithoefer.

March 29—"Bi-Lateral Polycystic Kidney With Polycystic Liver", (a case report), by Dr. Irving H. Schroth; "Congenital Pappilloma of the Bladder; Report of a Case With Unusual Obstructive Lesions", (a case report), by Dr. K. V. Kitzmiller and Dr. E. H. Niesen, with discussion by Dr. Arthur Wendel; "Prevention of Deafness in Cincinnati School Children", by Dr. Harry Dworkin, with discussion by Dr. R. E. Howard; "Factors Concerned in the Geographical Distribution of Heat Stroke in Cincinnati", by Dr. Eugene B. Ferris, with Dr. Marion A. Blankenhorn and Dr. F. K. Harder, discussants.—Bulletin.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CLARK

Dr. N. L. Burrell read a paper entitled, "A Review of 100 Cases of Granular Urethritis in Women", before members of the Clark County Medical Society at their regular bi-monthly meeting, Thursday, March 10, at the Hotel Shawnee, Springfield.—J. O. Neese, M.D., secretary.

GREENE

Dr. Lester W. Sontag, Fels Institute, Antioch College, Yellow Springs, read an interesting paper on "Evidence of Disturbed Prenatal and Neonatal Growth in Bones of Infants and Children", at a meeting of the Greene County Medical Society, Thursday, March 3. Dr. Warren C. Breidenbach lectured on "Undulant Fever".—Donald F. Kyle, M.D., secretary.

MIAMI

The talking motion picture "Syphilis", produced jointly by the American Medical Association and the United States Public Health Service, was presented by Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, at a meeting of the Miami County Medical Society, Friday afternoon, March 4, at Memorial Hospital, Piqua.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

A symposium on "Allergy" was given by Dr. G. C. Grout and Dr. L. E. Seyler at a meeting of the Montgomery County Medical Society, Friday evening, March 4, in the auditorium of the Fidelity Medical Building, Dayton.

Dr. Sidney McCurdy, Columbus, medical supervisor, State Industrial Commission, spoke on "The Relationship between State Medicine and Workmen's Compensation", at a dinner meeting of the society at Good Samaritan Hospital, Friday evening, March 18.—Mildred E. Jeffrey, executive secretary.

PREBLE

Dr. M. Tischer Hoerner, Dayton, spoke on "The Diagnosis and Treatment of Jaundice" at a meeting of the Preble County Medical Society, Wednesday, February 16, at the Court House, Eaton.—News clipping.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

MERCER

Dr. H. C. Weisenbarger, Lima, spoke on "Kidneys and their Diseases", at a meeting of the

BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

II. THE BLANCH

● Previously, we have described the reasons for the thorough cleansing of raw food materials prior to canning and the methods by which such cleaning is effected. Another basic operation in the commercial canning procedures for many vegetables and some fruits, is known as the "blanch". (1)

In essence, the blanch is an operation in which raw food material is immersed in warm or hot water, or exposed to live steam. The blanch serves a multiple purpose.

First, blanching serves to soften fibrous plant tissue. By so doing, it contracts or expands these tissues and thus insures a proper final fill in the tin container. Second, during the blanch, respiratory gases contained in the plant cells are liberated. This release of gas prevents strain on the can during heat-processing and favors development of a higher vacuum in the finished product.

Third, the blanching operation inhibits enzymes naturally present in the raw foods and prevents further enzymatic action. Inhibition of enzymes—particularly those inducing oxidative reactions, yields products of superior quality and nutritive values. Fourth, the blanch may serve as an added cleansing measure and also remove "raw" flavors from certain foods. A final function of the blanching operation is to fix or set the natural color of specific products.

In commercial canning practice, blanching is usually accomplished in equipment especially designed for certain types of products. In general, the raw products after thorough washing are conveyed through water or steam by various mechanical devices capable of adjustment so as to subject the raw materials to a particular temperature for the proper period of time.

Such, in broad detail, are the purposes and mechanics of the blanch, a basic operation in many commercial canning procedures.

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(1) 1937 Appertizing or The Art of Canning, A. W. Bitting, The Trade Pressroom, San Francisco.

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The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

Mercer County Medical Society, Thursday evening, February 17, at the Mercelina Hotel, Rockford.—News clipping.

SENECA

At a meeting of the Seneca County Medical Society, Thursday evening, March 10, at the City Hospital, Fostoria, Dr. W. W. Green, Toledo, talked on "The More Common Ano-Rectal Diseases, Their Diagnosis and Treatment".—Edmund F. Ley, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

DEFIANCE

At a meeting of the Defiance County Medical Society, Friday, March 11, at Defiance Hospital, the society endorsed the stand taken by the Council of the State Association concerning Group Health Association, Inc. An offer from the State Department of Health to present a refresher course in pediatrics was accepted. A fee schedule for the Aid to Dependent Children program was approved. After the business session, the program committee gave written questions to members on medical topics. General discussion followed.—E. P. Mitchell, M.D., secretary.

LUCAS

The following programs were presented by the Toledo Academy of Medicine during March.

March 4—"The Role of Vaccine Therapy in Bacterial Sensitivity", by Dr. Stanley E. Dorst, associate professor of medicine, University of Cincinnati College of Medicine.

March 11—Section of Pathology, Experimental Medicine and Bacteriology. "The Treatment of Bronchial Asthma with Aminophyllin", by Dr. Morris W. Selman, with discussion by Dr. Matthew Ginsburg and Dr. Sam Friedmar.

March 18—Medical Section. "Clinical Allergy", by Dr. Richard A. Kern, professor of clinical medicine, University of Pennsylvania School of Medicine.

March 25—Surgical Section. "Fracture Symposium"—(a) Wrist, Dr. D. M. Stewart; (b) Ankle, Dr. N. T. Barnes; (c) Patella, Dr. F. L. Eyestone; (d) Hip, Dr. L. R. Carr; (e) Spine, Dr. A. L. Bershon; (f) Skull, Dr. F. P. Osgood; Dr. Dale Wilson, Dr. B. J. Hein and Dr. B. G. Chollett, discussants.—Bulletin.

SANDUSKY

Dr. E. H. Porter, Tiffin, told of his experiences while traveling in Russia, and of the practice of medicine in Northern Europe, at a meeting of the Sandusky County Medical Society, Thursday

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Fifth District

(COUNCILOR: H. V. PARYZEK, M.D., CLEVELAND)

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during March:

March 4—Clinical and Pathological Section. "Two Cases of Septicemia Treated with Sulfanilamide", by Dr. C. C. Higgins; "Case of Streptococcus Pneumonia Treated with Sulfanilamide", by Dr. John Tucker and Dr. E. J. Ryan; "Tumors Arising in Lateral Aberrant Thyroid Tissue", by Dr. George Crile, Jr.; "Drugs Resistant Psoriasiform Syphilid", by Dr. E. W. Netherton; "Treatment of Polycythemia Vera", by Dr. R. L. Haden.

March 8—Military Section. "An American Doctor's Experience with the British Army During the World War", by Dr. Byron B. Colvin.

March 9—Practice of Medicine Section. "Heberden's Nodes, a Study of the Incidence of Hypertrophic Arthritis of the Fingers", by Dr. R. M. Stecher; "A Simple Test to Determine the Presence of a Gastro-Intestinal Lesion", by Dr. E. Woldman; "Insulin Treatment of Schizophrenia", by Dr. J. L. Fetterman.

March 11—Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "The Bearing of Prehistoric Skulls from Asia Minor on the Early Differentiation of European Races", by W. M. Krogman, Ph.D.; "Chemical Determination and Roentgenographic Discrimination of Mineral in the Human Skeleton", by Dr. T. W. Todd and D. Hagemeyer, M.A.; "The Role of the Vagi in Gastric Evacuation", by J. P. Quigley, Ph.D., and I. Meschan, B.A.; "Further Studies on the Metabolism and the Mode of Action of Vitamin D", by Dr. W. Heymann; "What Component of Soaps is Concerned in their Hemolytic Action?" by L. D. Edwards, Ph.D.—Bulletin.

LORAIN

"The Modern Treatment of Pneumonia", was the subject discussed by Dr. Gerald P. Shibley, Cleveland, at a meeting of the Lorain County Medical Society, Tuesday, March 8, at Hotel Antlers, Lorain.—L. H. Trufant, M.D., secretary.

Sixth District

(COUNCILOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

MAHONING

Dr. M. Edward Davis, associate professor of obstetrics and gynecology, University of Chicago, Medical School, spoke on "The Treatment of Hemorrhage Occurring Late in Pregnancy", at a meeting of the Mahoning County Medical Society,

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OBSTETRICS—Two Weeks Intensive Course starting June 6; Informal Course starting every week.

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Tuesday evening, March 15, at Youngstown.—Bulletin.

PORTAGE

Dr. Richard S. Knowlton, Cleveland, spoke on "Bronchial Asthma", at a meeting of the Portage County Medical Society, Thursday evening, March 3, at the home of Dr. A. O. DeWeese, Kent. Dr. Knowlton is a son of Dr. E. H. Knowlton, Mantua, who has been a faithful member of the society for 28 years.—E. J. Widdecombe, M.D., secretary.

RICHLAND

At a meeting of the Richland County Medical Society, Friday afternoon, February 4, at General Hospital, Mansfield, Dr. Arthur W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, spoke on "Child Welfare".—News clipping.

STARK

Dr. Marshall Clinton, professor of surgery, University of Buffalo School of Medicine, spoke on "Cancer of the Breast—A Review of 416 Operative Cases", at a meeting of the Stark County Medical Society, Tuesday evening, March 8, at St. Paul's Episcopal Church, Canton.—Clair B. King, M.D., secretary.

SUMMIT

"Surgical Problems of the Biliary Tract", was the subject discussed by Dr. I. S. Ravdin, professor of surgery, University of Pennsylvania School of Medicine, at a meeting of the Summit County Medical Society, Tuesday evening, March 1, at the Mayflower Hotel, Akron.—Bulletin.

WAYNE

Dr. Philmour M. A. Bein, Mansfield, was the speaker at a meeting of the Wayne County Medical Society, Friday evening, February 25, at Wooster.—News clipping.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

BELMONT

Dr. James Owen Howells, Bridgeport, was guest of honor at a dinner-meeting of the Belmont County Medical Society, Thursday, February 17, at South Bellaire, celebrating his 75th birthday anniversary. As a token of appreciation, Dr. Howells was presented with a gold watch chain and charm bearing an inscription, the gift of the society. His address at the meeting was on "Advancement of Medicine and Surgery the Last Few Decades".—C. W. Kirkland, M.D., secretary.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

ATHENS

At a meeting of the Athens County Medical Society, Tuesday noon, February 1, at Nelsonville, Dr. R. S. Moynan of the staff of the Athens State Hospital, read a paper on "Insulin Shock Treatment and Dementia Praecox".

Dr. C. C. Sherburne, Columbus, spoke on "Gonorrheal Arthritis", at a meeting of the society, Tuesday noon, March 1, at Athens.—News clipping.

GUERNSEY

Dr. Reo Swan, Cambridge, presented an interesting paper on "Serum Treatment of Pneumonia", at the bi-monthly luncheon meeting of the Guernsey County Medical Society, Thursday noon, February 17, at the Berwick Hotel, Cambridge.

Dr. Daniel G. Sanor, Columbus, spoke on "Pathology of the Eye", at the society's meeting, Thursday noon, March 3.—O. Reed Jones, M.D., Correspondent for *The Journal*.

PERRY

Joanne Ortelle, R.N., consultant, health and medical service, State Division of Public Assistance, spoke on "Health Service to Dependent Children", at a meeting of the Perry County Medical Society, Thursday noon, March 17, at the Park Hotel, New Lexington.—F. J. Crosbie, M.D., secretary.

WASHINGTON

"Drug Addiction" was the subject discussed by Dr. G. E. Huston, Lowell, at a meeting of the

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Washington County Medical Society, Wednesday evening, February 9, at the Marietta Memorial Hospital. Local dentists, druggists and nurses were guests at the meeting.—News clipping.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

JACKSON

Dr. Walter H. Hartung, State Director of Health, was a guest of the Jackson County Medical Society, at a luncheon meeting, Wednesday noon, February 23, at Jackson.—News clipping.

LAWRENCE

Dr. R. F. Massie spoke on "Highlights of Contagious Diseases", at a meeting of the Lawrence County Medical Society, March 15, at Ironton. Dr. H. S. Allen and Dr. A. D. Marting led the discussion.

The program committee, consisting of Dr. Vincent V. Smith, chairman; Dr. R. F. Massie; Dr. Thomas E. Miller; and Dr. Wm. A. French, has arranged the following programs for the next four months:

April 5—Spinal Anesthesia—Dr. G. K. Mahl. Discussion—Drs. Hoffman, Wm. F. Marting and Massie.

April 19—Gallbladder Disease with case reports—Dr. G. G. Hunter.

May 3—Orthopedics and Practical use of the Fracture Table—Dr. Francis Scott; Discussion—Dr. C. E. Vidt and Dr. O. H. Henninger.

May 17—Ten minute summaries of the Newer Things of 1937. Eye—Dr. Cosper Burton; Cardio-Vascular Disease and Internal Med.—Dr. G. K. Mahl; Surgery—Dr. C. E. Vidt; Pharmacology—Dr. F. R. Stewart; G. U.—Dr. Wm. A. French; Pediatrics—Dr. C. A. Casey.

June 7—Report on State Meeting—Delegates. Visits to several offices to talk about equipment and practical office methods.

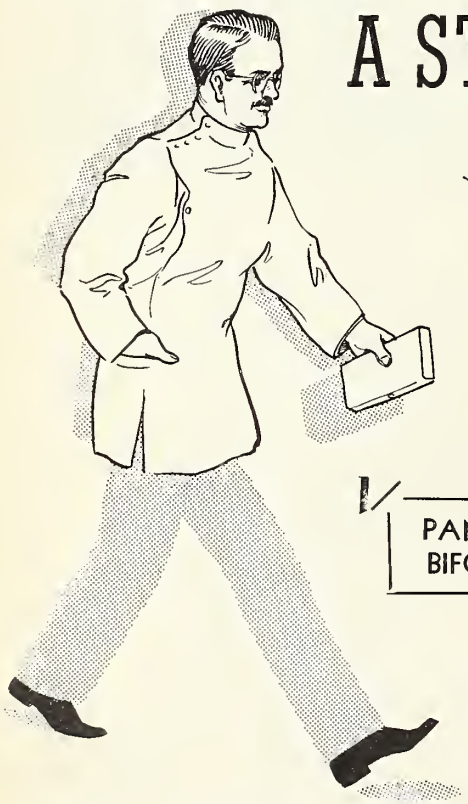
June 21—Rectal Diseases—Dr. V. V. Smith. Surgical case reports—Drs. Chas. Gallagher and Justin Payne.

July 19—Party at Lawco—Doctors' wives as guests.—Wm. A. French, M.D., secretary.

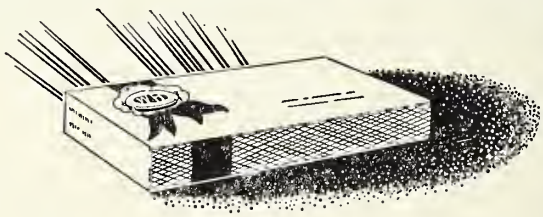
SCIOTO

Local druggists and dentists were guests of the Hempstead Academy of Medicine at a meeting, Monday evening, March 7, at Portsmouth. Frank Harris, superintendent of schools, Greenfield, spoke on airplane trips which he has made to various parts of the world.

Probate Judge Vernon Smith discussed "The Relationship of the Probate Court to the Medical



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Profession", at a meeting of the Academy, Monday, March 14.—W. M. Singleton, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

CRAWFORD

Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, was the guest speaker at a meeting of the Crawford County Medical Society, Monday evening, February 7, at Galion. His subject was "Diagnosis and Treatment of Syphilis".—News clipping.

FRANKLIN

The following programs were presented by the Columbus Academy of Medicine during March:

March 7—"Lobar Pneumonia", by Dr. M. A. Blankenhorn, professor of medicine, University of Cincinnati College of Medicine.

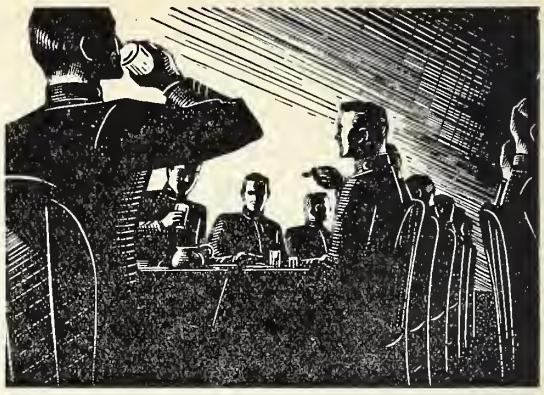
March 21—"Diagnosis and Treatment of Endocrine Disorders in Women", by Dr. W. M. Silbernagel, Dr. R. S. Fidler and Dr. E. T. Kirkendall.

March 28—Section in General Medicine. "Traumatic Surgery", by Dr. Joseph Price, Dr. R. O. Adams, Dr. John J. Wenzke, Dr. H. L. Harris and Dr. L. W. Adams. "The Management of Diabetes", by Dr. H. M. Clodfelter; "Demonstration of Diabetic Diets", by Jean Fleming, dietitian; "Some Interesting Therapy Cases", by Dr. Charles F. Bowen. This meeting was held at the Columbus Clinic.—Bulletin.

MORROW

In place of the usual monthly meeting of the Morrow County Medical Society at Mt. Gilead, members of the society went to Marengo, Tuesday, March 8, to honor Dr. F. E. Thompson who celebrates this month his 50th anniversary of active medical practice in that community. The Morrow County Dental Association and local friends and associates of Dr. Thompson joined in the dinner-meeting. Dr. Thompson was presented with flowers and fountain pen as a token of the honor and esteem in which he is held by colleagues. Every member of the society attended the meeting. At the time Dr. Thompson began his practice, there was not a mile of hard surface road in Morrow County and the only feasible method of transportation much of the year was horseback. Dr. Thompson is still in active practice, and his friends join in wishing him many years of continued service.—Todd Caris, M.D., secretary.

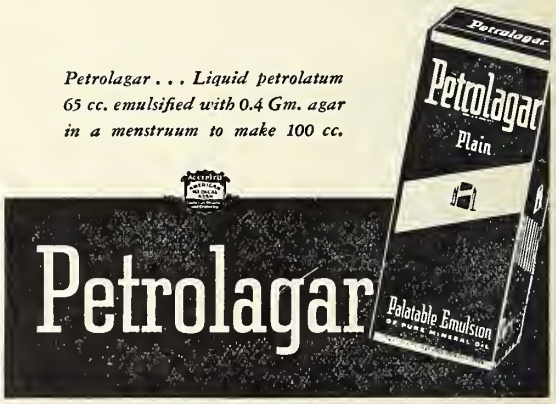
Cleveland District of the Ohio Physiotherapy Association is planning a series of five meetings on the subject of muscle and nerve disorders at which the speaker will be Dr. Albert Steegman, instructor in neuropathology at Western Reserve University, and director of the physiotherapy department at Lakeside Hospital.



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Refresher Courses in Pediatrics at Sandusky, Xenia, Greenville

Under the auspices of the Bureau of Child Hygiene, State Department of Health, a refresher course in pediatrics will be presented at the Hotel Rieger, Sandusky, Thursday, April 21. Dr. Sterling H. Ashmun, Dayton, will be the guest speaker. Erie County Medical Society will act as host and members of the Sandusky, Ottawa, Huron and Lorain County Medical Societies have been invited to attend.

At the afternoon session, beginning at 2 o'clock, Dr. Ashmun will discuss: "Infantile Paralysis, Diagnosis and Treatment; Diarrhea, Vomiting and Convulsions; Allergy in Children".

"Acrodynia", will be the subject presented at 7:30 P.M. This will be followed by a round-table discussion of the following subjects:

1. Is supplemental feeding in infants the first three days of therapeutic value or is it unnecessary?
2. What is the value of vitamins in pre-natal care?
3. Short wave diathermy in children.
4. The value of active and passive immunity of measles in children.
5. Some good suggestions on arriving at the proper formulae for artificially fed infants.

Following the round-table discussion, there will be a general discussion and review of all subjects considered during the day.

Dr. A. Graeme Mitchell, professor of pediatrics, University of Cincinnati College of Medicine will speak on "Endocrine Disorders in Children", and Dr. Robert A. Lyon, assistant professor of pediatrics, University of Cincinnati, will discuss "Syphilis in Children", at another meeting sponsored by the State Department of Health, Wednesday afternoon, April 6, at the O. S. & S. O. Home, Xenia, beginning at 2:30 o'clock. Greene County Medical Society will be the host. Members of the Clark, Champaign, Madison and Montgomery County Medical Societies have been invited.

Dr. Lyon will address a similar meeting at Greenville, Friday afternoon and evening, April 15.

Tumor Institute Opened

The Chicago Tumor Institute (a corporation not for profit) opened at 21 West Elm St., Chicago, March 21. It offers consultation service to physicians in the diagnosis and treatment of cancer and radiation facilities for cancer patients. The institute also proposes to conduct research and to offer training to physicians who may wish to qualify as specialists in the study and treatment of cancer. Officers include: Dr. Max Cutler, director of the Scientific Committee, and Dr. Ludvig Hektoen, president of the Board of Trustees.

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Knox Gelatine is scientifically prepared from carefully selected long, hard, shank *beef bones only*. Twenty-one control and laboratory tests are made throughout the process of its manufacture. As far as we know, no case of allergy has ever been traced to the use of Knox Gelatine. Contrariwise, there is reason to believe that when Knox Gelatine is added to milk, patients sensitive to milk will show no allergic response.

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Place the contents of 4 envelopes of Knox Gelatine in an ordinary drinking glass. Add 4 ounces of cold milk and allow to soak for five minutes. Add 2 more ounces of milk and stir until thoroughly soaked. Then place glass in small cooking kettle of hot water until gelatine milk mixture is thoroughly dissolved. Add 2 more ounces of cold milk, which will bring the temperature to a satisfactory warm drink of about body heat. A tablespoonful of prune juice or a few drops of any bland flavor like vanilla may be added.

Total: 8 oz. liquid—about 250 calories

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Extent of Measles Epidemic Shown By Figures for Jan. 1—March 15

Cases of measles reported to the Division of Communicable Diseases, State Department of Health, January 1 to March 15, 1938, totaled 16,519, compared with 699 during the same period last year.

Comparative figures for the same periods on other communicable diseases follow:

	1938	1937
Chickenpox	5,720	5,787
Diphtheria	312	309
Influenza	291	3,892
Pneumonia	874	2,525
Scarlet Fever	4,041	3,768
Smallpox	170	63
Tuberculosis	1,264	1,245
Whooping Cough	1,232	3,631

Chicagoans Address Allergists

At a meeting of the Cleveland Allergy Society, Tuesday evening, March 22, in the Herrick Room of the Cleveland Medical Library, a program was presented by three members of the Chicago Allergy Society. The speakers were: Dr. William H. Walker, "Proteins in Their Relationship to Allergy"; Dr. B. Z. Rappaport, "Pollen as an Antigen", and Dr. Tell Nelson, "Antigencity of Horse Hair". Dr. Walker is head of the Department of Physiological Chemistry, University of Illinois College of Medicine. Drs. Rappaport and Nelson are members of the Department of Internal Medicine. Officers of the Cleveland Allergy Society are: Dr. M. A. Weitz, chairman, and Dr. Benjamin Nozik, secretary.

Special Courses for Pediatricians

The annual postgraduate course in pediatrics given by the American Academy of Pediatrics cooperating with the University of Michigan, Wayne University and the Michigan State Medical Society, will be held at the Henry Ford Hospital, Children's Hospital and Herman Kiefer Hospital, Detroit, April 18, 19 and 20. A comprehensive program has been arranged. Ohio physicians are cordially invited to attend.

Course in Syphilis

In April and May the Graduate Course in Venereal Disease Control, Western Reserve Univericty, will offer a one-week refresher course in syphilis. This course will be conducted on the seminar plan with free discussion of problems in diagnosis and treatment of every type of syphilis. Part-time students will be accepted for longer periods.

One formal lecture on the several venereal diseases will be given during the week. The other phases of the subject such as intravenous and intramuscular treatments, darkfield examinations, etc., will be demonstrated.

The course is open without fees to any regularly licensed physician in any state. Further information and a copy of the working schedule can be obtained by addressing Dr. George W. Binkley, 2085 Adelbert Rd., Cleveland.

Memorial Library Dedicated

A new medical library for the staff of Cleveland City Hospital, developed by friends and associates of the late Dr. Harold H. Brittingham as a memorial to him was dedicated January 25. The library, to be known as the Harold H. Brittingham Memorial Library, is on the second floor of the hospital administration building.

Dr. Howard T. Karsner, professor of pathology, Western Reserve University School of Medicine, and director of laboratories at the hospital, delivered the dedication address. Fred W. Ramsey, city welfare director, responded on behalf of the city. Dr. Robert M. Stecher, chairman of the hospital staff, presided. A short violin recital was given by Dr. Jerome Gross.

Dr. Brittingham, member of the faculty at Western Reserve, and for years assistant head of the department of clinical medicine at City Hospital, died a year ago.

On January 19 radio station WHK, Cleveland, inaugurated a new series of fifteen minute programs, under the auspices of the Cleveland Better Business Bureau, in which fakers and their rackets are being exposed. The first production revealed methods fakers use in disposing of "quack" medicines.

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★Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐ Laryngoscope, 1935, XLV, 149-154 ☐
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O.H.I.

NEWS NOTES

Akron—Dr. G. E. Black has been elected president of the American Legion Luncheon Club.

Athens—Dr. Freeman A. Osborn spoke on "Venereal Diseases" at a recent meeting of the local Women's Federation.

Cleveland—Re-elected officers of the Cleveland Hospital Council include Dr. Geo. Edw. Follansbee, president and Dr. Robert H. Bishop, Jr., second vice-president.

Columbus—General staff officers of local hospitals for 1938 include: Mt. Carmel—Dr. C. C. Sherburne, chairman; Dr. H. F. Fulton, vice-chairman and Dr. W. F. Drake, secretary. Grant—Dr. J. H. Warren, chairman, and Dr. E. W. Arnold, secretary.

East Liverpool—Dr. John A. Murphy was recently appointed city health commissioner for one year, succeeding Dr. Roy C. Costello, who was not an applicant for re-election.

Findlay—"The Physician's Psychological Approach to His Patient", was the subject of an address made by Dr. W. F. Galbreath at a recent meeting of the Findlay College Y.M.C.A.

Forest—Dr. W. N. Mundy gave a talk on "Health" at a recent meeting of the Local Young Farmers' Association.

Gallipolis—"The Care of the Eyes" was the subject of a health talk made by Dr. N. A. Martin at a recent assembly meeting of the Academy High School.

Greenville—At a recent meeting of the Western Ohio Probation Association, Dr. W. D. Bishop, Darke County health commissioner, spoke on "Crippled Children".

Jackson—Speakers at a recent institute sponsored by the Jackson County Board of Public Assistance, included Dr. Walter H. Hartung, State Health Director, and Dr. P. L. Harris, assistant chief, Bureau of Venereal Diseases, State Department of Health.

Lancaster—Dr. George T. Harding, III, Columbus, spoke on "The Influence of the Mind Over the Body", at a recent meeting of the Rotary Club.

Lima—The Citizens' Recreation Committee, has been re-named "The Bradfield Community Association", in honor of the late Dr. J. C. Bradfield, widely known colored physician who died more than a year ago.

Mansfield—Dr. Neil T. McDermott, Cleveland, and Dr. F. J. Heringhaus, Mansfield, led a discussion on "The Mental and Nervous Disorders of

International Medical Broadcast

Leading American and British physicians, 6,000 miles apart, will confer via the radio, on "Rheumatic Heart Disease", Monday evening, May 2, at 6:30 Eastern Time, over WEAF and the Red Network of the National Broadcasting Company. This first international broadcast on any health problem has been arranged by the American Heart Association in observance of National Child Health Day. Lord Horder, physician to the King of England, will open the conference from London. Dr. Homer F. Swift, Rockefeller Institute, New York City, and Dr. T. Duckett Jones, Boston, will then speak from Atlantic City, and Dr. William J. Kerr, president of the American Heart Association, will take up the discussion from San Francisco.

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3,000 dispensing envelopes, $6.00. 1,000 statements and 1,000 letterheads, 5½ x 8½, Hammermill Bond, $5.00. 3,000 labels, $5.50. All three items, $15.50. **Alexander Printing Co.**, Ada, Ohio.

FOR SALE—As I am discontinuing medical practice, will dispose of entire office equipment. Bookcase, instrument cabinet, surgical instruments, infra-red light, adjustable examining chair, rolltop desk, medicine case and bags, etc. **J. J. Reynolds, M.D., 506 Wayne Ave., Defiance, Ohio.**

WANTED—Position as medical stenographer in office, hospital or clinic. Ten years experience in all branches of clerical medical work in surgeons office in Indianapolis. Working knowledge of X-ray technique. Excellent references. Address **Miss Anna Prewitt Baber, 2226 N. Locke St., Kokomo, Indiana.**

FOR SALE—Giant Victor Eye Magnet for 110 V direct current. Very useful in industrial work for the removal of foreign bodies. Write *M. J.*, care *Ohio State Medical Journal.*

FOR SALE—Complete office equipment, including Engeln X-Ray Unit with accessories, of the late J. W. Jolley, M.D. Ideal location. May be seen by appointment. Write **Mrs. Cassie M. Jolley, Exct. 202 S. Seffner Ave., Marion, Ohio.**

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Youth" at a recent meeting of the Community Christian Youth Forum.

Marion—Dr. Neuman Sifritt has been reappointed health commissioner of Marion County.

Massillon—The lives and accomplishments of several of America's outstanding physicians were discussed by Dr. Arthur G. Hyde at a recent public lecture in the auditorium of the local library.

Middleport—Dr. Ernest F. Maag gave an address on "Our Bodies and Health" at a recent meeting of the Men's Fellowship Society of the Church of Christ.

Minster—Dr. C. L. Dine celebrated his 80th birthday recently.

Portsmouth—Dr. George D. Blume was recently appointed health commissioner of New Boston.

Salem—Officers of City Hospital for 1938 are: Dr. Harry H. Bookwalter, Columbiana, president; Dr. R. T. Holzbach, Salem, vice-president, and Dr. Guy E. Byers, Salem, secretary-treasurer.

Springfield—Dr. G. M. Lane spoke on "Modern Medical Practice" at a recent meeting of the Exchange Club.

Tiffin—Dr. E. Hershberger spoke on "Making the Most of Marriage" at a recent meeting of the local Y.M.C.A.

Toledo—The bulk of the estimated estate of $2,000,000 of the late Frank Collins, will go to the Toledo Hospital, under the terms of his will recently filed in the Lucas County Probate Court.

Troy—Dr. Kurt C. Becker, Troy and Miami County health commissioner, spoke on "The History and Activities of Public Health" at a recent meeting of the Altrurian Club.

Youngstown—General staff officers of St. Elizabeth's Hospital for 1938 are: Dr. F. W. McNamara, chief; Dr. J. B. Nelson, vice-chief; Dr. Saul Tamarkin, secretary-treasurer.

Zanesville—Work has been started on the new $99,000 boiler-room and laundry for Good Samaritan Hospital.

Dr. Schick Wins Gold Medal

The New York Academy of Medicine at a meeting March 3 awarded its gold medal to Dr. Bela Schick in recognition of the twenty-fifth anniversary of his announcement of the Schick test for susceptibility to diphtheria. Dr. Schick, a native of Hungary, practiced in Vienna from 1902 to 1933, and was professor of pediatrics at the University of Vienna from 1919 to 1923. In 1923 he came to the United States, and is now pediatrician-in-chief at Mount Sinai and Sea View Hospitals, New York City, and consultant for various other hospitals.

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THE CHALLENGE TO THE MEDICAL PROFESSION

By JAMES C. SARGENT, M.D., MILWAUKEE, WISCONSIN

TO say that I am overwhelmed today is certainly trite but it is also certainly true. I would not for the world seem ungrateful for the several personal honors that were so kindly listed in presenting me, but I submit that I still have not earned this prominent part in your program. Truly I am flattered and delighted. Then, too, I would indeed be calloused did I not thrill to the revival of old friendships and to the recall of those memories that are possible only in a reunion such as this. Born of a Baptist minister I was moved early and often during my youth here in Ohio. That simple fact left an uncommon number of places and friends in my happy memory. Yet even the greatest of these stands a poor second to the four full years that began quaking before a shrewd and scrutinizing Muchmore and ended proudly before a towering Thompson.

I cannot escape the feeling that a graduate of any university once he has been called upon at an occasion of this sort, would be truly thoughtless if he did not pause for a minute in gracious memory of those responsible for the great privilege of his education. There is neither time nor is this an occasion for me to undertake a detailed account of the long list of teachers upon whose years of service and devotion this great school has been constructed.

TRIBUTES AND INSPIRATIONS

Has the span of time left anyone in this room today unmindful of the vision and careful planning of "Daddy" Means? To those of us graduating in the early 'teens the difference between Starling Ohio Medical College and Ohio State University was merely one of the engraving on a diploma. But to those of you who have followed, this College of ours has come to mean infinitely more through his prophetic wisdom. My special tribute, too, to Landacre and to Scott. As teachers they were remarkable opposites. One took the even, open, careful trail of friendly, almost fatherly, attention; the other darted off through the exciting bypath of invective and exaction; yet in the end each had gone unfalteringly to his goal. However well you of these last few years may have fared through their successors, I have only pity for you that you missed the fine inspiration which flowed in such abundance from each of these two wise men.

It would be real fun to go on and on. I should

Read before the Annual Postcollegiate Clinic Assembly of the Ohio University, College of Medicine, at Columbus, March 3-5, 1938.

The Author

● Dr. Sargent is a graduate of Ohio State University College of Medicine, 1915; president, State Medical Society of Wisconsin; fellow American College of Surgeons; member American Board of Urology, American Urological Association; director of division of urology, Milwaukee County Hospital; St. Joseph's Hospital; clinical professor and director of division of urology, Marquette University School of Medicine.

like to tell of such personal things as the striking way in which the then quite young and dapper Dr. Dodd seered forever in my student mind the simple, worthy fact that in Medicine one should never expect to meet the unexpected; that when all known means of study have been exhausted and one is left finally with the necessity of simple guessing, he will prove most likely right who expects to find the common thing. Certainly not the least among the clinical men in the hands of whom my humble mold was cast stood the keen, cultured gentleman whose every succeeding year has seemed but another harvest time of laurels. I met him in the chair of Medicine. Since then you have lifted him to your Deanship and in recognition of his abundant qualities of high minded leadership Dr. Upham stands today the titular head of the greatest professional organization the world has ever known.

Why shouldn't I come back to my Alma Mater full with gratitude and with pride?

Through the courtesy of those responsible for the arrangement of this year's Clinic Assembly I am privileged today to undertake a discussion with you on "The Present Challenge to the Medical Profession." That such a subject is at once profound and exceedingly involved, I am sure you will readily agree. At the risk of boring you with an experience somewhat personal, I propose to develop my thoughts around a program presently commanding the attention of the profession of my adopted state. My purpose in this approach is twofold. Primarily it is intended to insure you against my losing us all in a rambling discourse completely beyond my ken. Then, too, it is prompted by the firm conviction that, after all, there is no substantial difference between the challenge that confronts the profession of our two states.

WISCONSIN AND ITS PROFESSION

For the sake of background I think at the start I should point out several matters of peculiar interest concerning Wisconsin and its profession. Wisconsin long has held the reputation of being a distinctly progressive state. For a full generation its political life has been colored by a distinctly social viewpoint. Wisconsin pioneered in the field of workmen's compensation and long before the New Deal had gotten around to suggesting them for enaction by the several states, Wisconsin had both unemployment insurance and old age pensions in effective operation.

Somewhat surprising in view of our penchant for quite advanced social thinking, Wisconsin is a state remarkably free from any of the rattle-brained schemes of medical and hospital practice which are so rampant elsewhere throughout the land. While one attempted it and is failing, so far we have nothing to contend with in the nature of the well known and highly touted "loose-leaf" clinic of southern California. Group Hospital Insurance has not yet gained as much as a toe hold in our state. Even the long established panel system of medical practice under industrial compensation and the long suffered county physician system of medical relief are both being rapidly opened up in response to a growing faith in the principle of "free choice" in medical practice. It seems quite obvious then that, with a soil so fallow, we are in a particularly favorable position to plan the future coolly and carefully, free from the prejudice and confusion of any misguided efforts already established.

Finally, in Wisconsin we are now blessed with a degree of professional enthusiasm and loyalty that is almost unique. I need not labor that point beyond the mere statement that our House of Delegates last fall placed an extra assessment of $10.00 upon the heads of its members without a dissenting voice. We had just survived a long and difficult legislative battle that was quite disturbing. One Honorable Biemiller, a socialist from Milwaukee, had suddenly dumped into the hopper of our legislature a stack of eight bills any one of which would have revolutionized completely the care of our sick while the sum total of the group tied end to end made a running outline of the history of the socialization of Medicine from the earliest Krankenkassen and Mutualites of the old world on down to the present day cooperative movement in Norway and even group hospitalization in New York.

Again I must beg indulgence for this somewhat personal reference. It serves excellently my purpose, however, in that it sets off in eloquent example the theme of my thesis. There is indeed a real challenge to our profession and I propose that we go to meet it.

CRY OF THE UPLIFTER

Wherever the profession is being hounded by uplifters and social dreamers to accept this or adopt that among their gossamer schemes of reform, invariably the very soul of their appeal is the claim that medical care is low in standard and not properly available at that. The now famous five years and a million dollars of the Committee on the Cost of Medical Care boiled down to little more than an elaborate and somewhat fanciful diatribe on the alleged inadequacies of sickness care in America. First the Mystic Order of the Shrine and then the President of the United States noted what they took to be the inadequate care of the crippled child. Last winter the Surgeon General found the public health aspects of syphilis in dire need of more adequate provision. This winter the Department of Labor discovers that the medical care available to the mother and her child is similarly sadly inadequate. Regardless of which of his eight bills he happened at the moment to be discussing, our Wisconsin Mr. Biemiller invariably used as his

principal argument in urging the adoption of that particular bill, his firm conviction that under the present system the care of the sick in Wisconsin was horribly inadequate. Inadequacy is the charge wherever we turn; inadequacy is the excuse whenever we are urged to change.

Right at this point I want to repeat a statement that I have made many times before. It is my honest belief that throughout our fine land there is not one soul today who is in genuine need of sickness care in any form or in any amount that is being denied him simply because of lack of money to pay for it. I don't believe there is a doctor in this room who does not know with me that sickness service of good standard and in reasonable amounts is available to anyone and everyone regardless of their ability to pay. If that is not true our profession is in a sorry plight, indeed.

CAUGHT IN THE NUT-CRACKER

But let's go beyond this simple truth. Is there anyone in this room who is at all sure that there are not numbers of people right here in Ohio this moment standing in serious need of one or another form of sickness care? I am not. On the contrary I suspect that there is a very substantial number of sick in your state and in mine who are going without necessary hospital and even medical care. That their neglect is in spite of available service is merely bickering the point. If sickness goes uncared for it matters little the cause. Of course there are those whose neglect arises through religious superstition or through sheer penury. They merit profound pity and tolerance, certainly. But there are others, perhaps many others, who are suddenly caught in the nut cracker between a bare living wage without savings and the sudden unexpected need of hospital or other major services that involve sums of money so sizeable and beyond their ready means as to force them to serious neglect.

TRUTH BEING SOUGHT

In response to the present widespread claim that provision for the care of the sick under our present system is seriously inadequate, we of the profession in Wisconsin have determined to seek out the truth and to put a stop to our own uncertainty and to the cock-suredness of our carping critics as well. To this definite end we have been sending a committee of five physicians here and there about our state charged with the specific job of determining without fear or favor just what kind of care our sick are presently getting; where, if at all, our present system has fallen down; where if possible, it can be expanded or improved. This "roving" committee is spending day after day in key communities interviewing everyone who might be expected to have a genuine and intelligent interest in the care of the sick; health officers, county and city nurses, county judges, school principals, social workers, parent-teacher groups and even the heads of labor and farm groups. Of course this committee counsels with the doctors, both rural and urban, to help in correlating and evaluating its findings. It gets its basic facts, however, from sources entirely free from the possibility of professional prejudice.

At the present time it would be pure presumption for me even to hazard a guess as to what the final results of that survey are to be but it has gone far enough already to turn up some genuine surprises. Perhaps one or two might be of interest here. There are some counties in Wisconsin without towns of any real size; counties in the poorer northern sections of the state. Despite their economic difficulties it is usual to find in these counties that the public health program is pretty well developed throughout the countryside. Here is the interesting fact, however. In certain of those counties which are blest with sizeable centers of industry and population the public health program, though elaborately developed within the cities, stops dead in its tracks at the city limits. Milwaukee has won the annual health award of the National Chamber of Commerce so consistently in years past that it actually has been barred from competition. Yet during these same years the youngsters in the little red schoolhouses on the fringe of Milwaukee County have been using old fashioned tin cups and roller towels! In our city of Sheboygan every school child is vaccinated, immunized, examined annually and then screened for tuberculosis at high school age. Yet 6,500 of the 8,000 lads and lassies in the surrounding countryside are not even vaccinated! Would anybody dare to deny that there, at least, is an astonishing instance of inadequacy in sickness care? Here in Ohio you are especially blest in having a large force of full time county health units so in most of your counties routine public health work is on a fair par with your cities. However, to avoid leaving the impression that the Winnebago and the Sioux are still running wild across Wisconsin's countryside disrupting our rural health work, I would remind you that right here in Franklin County during 1936 when figures were last available there were 1,195 vaccinations recorded for the city of Columbus while only 28 vaccinations were reported throughout the rest of the county.*

STANDARD OF SERVICE HIGH

Everywhere, I believe, it is agreed that the general medical, surgical and hospital care of those who are actually on the relief rolls is far more complete and of better grade than these same people ever before have enjoyed. Oddly enough there are glassy eyed crusaders who insist that even that is not enough; that a Mayo Clinic must be made available to all. Neverthe-

*Includes only work of the Boards of Health.—Editor.

less, I believe it a fact that both within the profession and without, it is a matter of quite general accord that a high type of sickness care has been made available to the very poor throughout the land through the cooperation and careful planning of relief agencies and local units of organized medicine. Here, as in that small group of people with ample means, there seems little indeed to indicate that good sickness care is not readily available and generally availed of by all.

I have long been impressed by the fact that severe sickness can and often does present a real economic problem when it falls sudden and serious within the homes of people of meager means. I have profound contempt, however, for those professional reformers whose shallow surveys and rabid broadsides have been goading the public into the notion that, for the great mass of honest and deserving common people, the time honored plan of private medical care has completely broken down. Not the least of the serious blunders back of this disgraceful aspersion upon an age old and honorable system is the very pertinent fact that the vast majority of all sickness is of a minor degree involving quite minor services the costs of which are also quite minor and well within the means of anyone who is at all self-supporting. Sickness when severe and prolonged, however, is another matter. Caught in the throes of really serious sickness a wage earner of modest means may suddenly be faced with hospital costs, surgeon and specialists fees, X-ray and other sizable expenses the sum total of which is utterly overwhelming.

CATASTROPHIC ILLNESSES

It is at this point that something always happens—something the significance of which should be a concern of the first magnitude to our profession. Seized suddenly with sickness costs of catastrophic proportions our patient may have the good fortune to find his economic status suddenly changed so that he becomes entitled to public relief. If he then has the good judgment to take advantage of the change, he will have made available to him necessary and proper sickness care. Or stricken suddenly but still not entitled to relief service he may have the good sense to seek some special consideration from his hospital and doctor. That escape is age old and on the whole a thoroughly happy one since it gives those serving him the chance of dictating a little harmless social justice by insinuating the unpayable balance into the accounts of others more fortunate. Here again, providing he buries his pride and then proceeds properly, the patient's sickness care becomes completely adequate and of unquestioned standard.

But there is still one great void in the picture. As a profession we have come up to the present day altogether too complacent in the belief that by organizing adequate facilities for the care of those actually on relief and then by maintaining our traditional readiness to serve others needy but not technically entitled to relief, we have established a system of sickness care that is uniformly good and in one way or the other availed of by all. Standing pre-eminently first among the several phases of the present challenge that confronts our profession there is, I submit, the necessity of knowing the truth or the falsity of that professional belief. I, personally, hold grave doubts concerning it. Soon after I was delivered from these halls of learning I began meeting people who were not getting a break, so to speak when they were sick. A strange blend of religion and superstition accounted for some; others were just too ignorant to know how to go about it. Over and above these however, there was a substantial number of deserving and discerning people whose limited means, through one process or another, led them to tragic neglect. With the depression magnifying enormously all economic ills this, along with many others, has been thrown out in bold relief until now all but those who will not see must know that here, surely, is a problem which is real.

PROFESSION MUST SPEAK AND ACT

That leads me to discuss for a moment another phase of this subject of the inadequacies in sickness care; a phase by the way which is coming to assume a position of commanding importance. In perfectly natural response to the professional apathy that has prevailed in this whole affair, we are momentarily confronted with an unbridled rush of public testimony all of which is quite hysterical and most of which is quite untrue. Certainly a substantial part of our responsibility in making out the truth concerning the inadequacies and inefficiencies in present day care of the sick, is the necessity of clarifying the many half truths and silencing the many untruths that are being poured into present day public consciousness. Put simply, there has come a time when less heat and more light is the thing that is needed.

But a few weeks ago the United States Public Health Service announced the final results of its survey of 800,000 sample families made by a heterogeneous group of W.P.A. workers under a system of house to house canvass and using a complicated form questionnaire as a means of determining the adequacy and availability of sickness care throughout America. Obviously a method of investigation as crude as this could not fail to be grossly inaccurate and misleading. At the same time, if one but stops to realize the powerful force of its official sponsorship it is equally obvious that there is little chance to criticize, to correct, or to bury it. Only when the profession itself shall have made an intelligent and sympathetic survey of this very problem will there be an end to such clearly harmful ventures

—harmful even though they be inaugurated with the very best of intentions.

TOO MUCH LOOSE TALK

To this same general end it seems also clear that the profession has a real responsibility in discouraging some of the loose talk that its own votaries are feeding these days in such quantities to an undiscerning and excitable public. It is outlandish enough for some self-announced lay prophet to be allowed to go unchallenged when he breaks into wide print telling our young manhood, now that sulfanilamide is available, that gonorrhea is merely a matter of four days and 40 cents worth of treatment. It approaches a national scandal, however, when members of our own profession deliberately engender in the minds of the people of America the astonishing misconceptions that one out of every ten of them has syphilis and that the disease is so ravaging and so rampant as to constitute a commanding threat to the general public health.

It was with the formation of the now famous Committee on the Cost of Medical Care that a group of the great foundations first developed the remarkable technique of calling together a number of individuals from within our own and allied professions whose well known names and high sounding titles would insure great weight being given its final report. Then by purposeful selection of a goodly majority of those asked to serve on the committee or commission its thinking could be steered deliberately to the point of conclusions foreordained. Precisely this same technique is now being employed with telling public effect in the so-called advisory conferences which are being called in Washington from time to time purporting to give sound consideration to one or another prominent aspect of the public health. Something of this same idea was used by the American Foundation Studies in Government which ended in the famous Lape report though in compiling its material it used one interesting and perhaps noteworthy refinement. It had the affrontery to take what had been obtained as informal and quite confidential information and by the simple expedient of wily editing created a public effect that very few if indeed any of its contributors ever dreamed was intended. Not to mention the harm actually done, it is nothing short of pathetic to contemplate the golden opportunity lost through this prostitution of the art of survey and investigation simply for the sake of public acclaim, or in order that bureaucratic power or even political effect might be gained. Thus organized under the powerful sponsorship of high public office or by one of the great foundations, this sort of artificial build-up has an impact profound beyond any possibility of material lessening. I venture the suggestion, nevertheless, that the duty of the organized profession in this matter has come to be quite clear and now that the issue is sharply defined, some form of effective counteraction simply has to be found. Unless some solution can be found, and soon, these several powerfully organized pressure groups will have so distorted and disorganized sickness care in America as to leave it floundering, with old world medicine, in a sea of hopeless confusion.

HARM DONE BY PHYSICIAN-ORATORS

Perhaps it is pertinent to point out right here that it might prove a really effective deterrent if the words and actions of each of those invited to serve in these organized maneuvers were reviewed back home with more of a critical eye. Of course, a few of the bell sheep chosen for these conferences and commissions are truly sacrosanct. Then too, by sheer sufferance it seems, several of the mighty of our own great professional organizations are always seated silenced throughout the crowd. It is, the great mass of the appointed, however, who furnish the real weight to the effect intended. Largely by the implied consent of silence, somewhat by thoughtless admissions or confused remarks tuned up here and suppressed there, the conclusions and recommendations of this great mass of the appointed is moulded deftly to the pattern desired.

In the accomplishment of all this, programs are made up of speeches by health officers and other public servants of known social and political color or by certain prominent physicians, often teachers in our Medical Colleges, who are emboldened by the flattery of official notice to glib remarks which would be thoroughly and justly resented back home. I should like to stop for a moment to quote from the published minutes of the "Conference on Better Care for Mothers and Babies" held only a few weeks ago in Washington under the auspices of the Children's Bureau of the United States Department of Labor and with the open blessing if not actually inspired by the United States Public Health Service. I am reading from the studied remarks of one Dr. M. Edward Davis (Associate Professor of Obstetrics and Gynecology, University of Chicago School of Medicine). Before this remarkable assembly of a thousand health officers, government officials and social workers most of whom are either lay men or lay minded, Dr. Davis made the astounding assertion that (and I quote):

"The family physician has not had the opportunity to obtain a thorough training in obstetrics. Medical schools have not provided him with sufficient background in this field so that he can provide adequate care. He must, therefore, rely on his own resources and on what little experience he has been able to obtain in private practice. He attends most of his deliveries with fear and trepidation, hoping that nature will be kind and that the process will be normal. When an emergency arises, he does what he can with his limited

knowledge and often the lack of suitable facilities and help."

One cannot help but wonder what the effect of that outburst would be upon the physicians in and about Chicago if it met their notice.

In all seriousness, gentlemen, I submit the suggestion that it is both time and proper that the organized profession of America put a stop to this form of two-timing. A strong home-town interest in who attends these commissions or conferences, what transpired through their silent consent or what, if anything, they had to say might be a procedure worthy of good trial. Faced with some such critical reception back home, it might just happen that fewer of us would care to make the trip. Certainly, it is time that American Medicine meet the stark need that prevails for a careful, sympathetic and forward looking survey of the whole matter of the quality and availability of sickness care. But certainly, also, American Medicine cannot escape the necessity of calling a halt to the orgy of loose and unbridled thinking that is being prompted nowadays through the presumptuousness of bureaucracy and abetted by the thoughtlessness of many of our own numbers who should and do know better.

PLANS MUST BE ANALYZED CRITICALLY

In meeting the challenge that confronts the profession, to seek out the truth concerning the shortcomings of the medical care that we are presently furnishing, is but to go half way. Obviously, to meet it fully is to make proper provision for the correction of such shortcomings as may be found. Earlier in my thesis I expressed the conviction that change of some kind and degree is already upon us. In that regard, let it be said that my one and only concern springs from an anxiety that that change have the benefit of careful planning and intelligent direction. Clearly, as that change takes shape it is bound either to follow along lines already tested by wide trial elsewhere or it is to strike out on ground entirely new and unbroken. The conclusion seems to me inescapable that it were utter folly to undertake any move looking toward substantial change from our present form of sickness care without a more thorough and sympathetic review of those methods already exposed to the light of really substantial experience.

Lest someone suspect that my own thinking is too advanced, I hasten to assure you that a more than casual study of the several forms of supplied sickness care presently in operation in the old world leaves me quite cold to the claims of their proponents. I submit the fact, however, that my own impressions, and I am sure the impressions which are held generally by the profession at large, have grown out of an interest in these foreign systems that has been profoundly critical. On the very face of things it is obvious that a highly socialized form of medicine under state control could not possibly have survived a life time in Germany nor even a quarter century in England, France, and Scandinavia without certain definite virtues. It were tragic indeed if the real defects of these several systems be allowed to blind us completely to their proven worth, whatever the disproportion may be. As we approach the second phase of our challenge, then, we must seek in earnest for whatever there is of actual good in old world medicine. Beyond that, there is nothing for us to lay course by except the several new and experimental ventures that are so distinctly American.

While it may have been quite old world in origin, health insurance has assumed several aspects during its short career here in America that are completely new and distinctive. For one thing, the employe benefit associations of our larger industries have proved an excellent means of furnishing the element of compulsion so necessary to the social success of any health insurance, without selling out its control to the politicians by making it a matter of compulsion by law. Moreover, with health insurance, as with medical relief, we in America are drifting definitely away from the panel system of medical practice in favor of the principle of free choice. In these and other ways health insurance in America presents a pattern somewhat distinctive. However, with its somewhat limited experience here and with its utter lack of uniformity, it still remains a system of distribution of sickness care so basically old world in type that the final answer as to its real usefulness must rest largely upon its record there.

Of distinctly American origin, though but little tested, is the idea of post service payment of sizable sickness costs on some convenient installment basis. On its very face this novel notion is but a refined collection device. If it is coupled with an intelligent effort at financial investigation it may serve admirably as a guide in adjusting the size of fee to the ability to pay but its social value as an aid in the better distribution of adequate care to the sick could never be more than incidental.

GROUP HOSPITAL INSURANCE

And so finally we come to America's one and only substantial contribution in the field of social experiment along the general lines of sickness care. I refer to group hospital insurance. While it is certainly true that physicians the length and breadth of the land have been and still are somewhat slow to warm up to this new development the fact stands out pre-eminent that, of all the modern schemes for change in sickness care, this has earned a place distinctive and apart. Here, at least, is a program aimed at the heart of the great problem of the catastrophic costs of

serious sickness. Here, at least, is a major development in the general field of the economics of sickness care that seems filled with real promise.

But, "All that glistens is not gold,
Often have you heard that told."

While fully aware of the great promise that lies in thus applying the principle of insurance to the quite sizable costs of hospitalization; while conscious of the remarkable growth that the movement has shown; while aware, even, of the enthusiastic acclaim in which it is held by hospital, patient and doctor alike when operating under it, I still submit that this is but a groping experiment utterly untested and immature and one that most certainly must be given the benefit of great study and generous refinement if it is not to prove a Frankenstein monster which may well turn upon and destroy us all.

Outstanding among the several serious defects that have loomed up large already is the simple fact that group hospital insurance as now devised fails miserably in reaching that large mass of people of low income so sorely in need of some such means of help when serious and costly sickness falls. The Patron Saint of group hospitalization himself now freely admits that its present field of usefulness is limited socially to the upper middle class and geographically, to the great industrial centers of our north central and eastern states.

POLITICAL IMPLICATIONS

A mere smattering of experience with present day legislatures is all that one needs to judge the political implications of that simple fact. In Minneapolis and St. Paul as in each of the other centers in which the movement has been begun we are presently seeing a great rush of large groups of the well employed for membership. But the school teachers, the millwrights and the department clerks of the twin cities are a quite small and somewhat pampered fraction of the wage earners of Minnesota. When a few years have passed to demonstrate the social value of hospital insurance for this favored group the farmer-elected legislature of Minnesota may very well decide that sauce good for the goose is sauce good for the gander and the private hospitals of Minnesota might wake up some day with the state gone into the hospital insurance business in order to secure for its large group of less favored voters the benefits of this new social order. Just as sure as there is a state house in St. Paul that very thing will happen if group hospital insurance does not find some effective way of reaching down to include the great mass of God's honest, industrious poor, rural as well as urban.

And that is not all. These same twin cities lie but a stone's throw from a dozen sizeable Minnesota and Wisconsin towns; towns which long have had first class hospitals and surgeons in their own right. Already it is being suggested that their hospital insurance benefits be expanded to serve these small surrounding towns. I don't know how the feeling is in Minnesota regarding this but I can assure you that a concern has developed among small town doctors and hospitals in the neighboring counties of our state which had considerable to do with the action of our House of Delegates in authorizing a retainer of $10,000 to employ an insurance actuary of national repute to help lead us out of the wilderness. No, hospital insurance will continue a growing threat to the great number of well equipped and properly manned small town hospitals of America until some way be found to broaden the plan to include all reputable hospitals wherever they may happen to be.

PRESENT FLAWS AND WEAKNESSES

One might go on to point out a number of other serious objections to group hospital insurance as we presently know it. There is the matter of the furnishing of professional services in the X-ray and pathology laboratories threatening not alone the caliber of the service the patient gets, but leading inevitably to a steady deterioration of the very specialties themselves. Then there is the important question of management and control. One cannot point convincingly to any proof that hospital service has been benefited by the recent rapid shift of hospital management away from professional influence and control. At least until some such benefit has become apparent one can seriously question the complete independence in hospital control contemplated under the present program of group hospitalization.

Serious as these several objections are, the greatest indictment of all lies in the fact that group hospitalization in its present form fails miserably in meeting the serious social problem for which it was originally intended. Rather, the whole movement has taken on the pattern of a cold-blooded business venture in hospital management. That it is selling like hot cakes among the upper middle classes in our large industrial centers makes for good business certainly but it also means that there has been rank failure in our social planning.

The question quite naturally arises if there is any possible way in which hospital insurance could be expanded to cover those who stand in genuine need of some such a program. To accomplish that, some practical way must be found to make it compulsory, since experience already has proved that it will not be bought voluntarily by those who need it most. Some practical way must be found to go beyond the present groups of the well employed, spreading the benefits to

the large mass of independent workers, farmers and the casually employed. Some practical way must be found to free it from its present unsocial limitations as to type of sickness and as to length of service. Some practical way must be found to insure that professional services shall remain professional. And, finally, some practical plan must be devised wherein actual hospital management under the system shall remain within the control of the profession where it ought ever to be.

THE CHALLENGE

Early in my thesis I called attention to the fact that by gradual cooperative planning between the relief agencies and the profession a high type of sickness care has been made generally available to all who are actually established on relief. Moreover, in the great mass of low income but self-supporting common people sickness normally is of ordinary kind and costs. In this great group suffering only minor ailments it is neither necessary nor indeed wise to interpose any form of supplied sickness care. Their present care stands second to none in all history and no one can possibly justify meddling with it. But there still remain those occasional instances in which serious sickness brings with it costs that are utterly overwhelming. Either we shall make some provision for these occasional economic catastrophies of illness or a continuation of the present serious neglect of this small group will bring down upon the heads of the profession some such a highly socialized system of sickness care as has befallen the old world. That is our challenge.

Let us first know the true dimensions of our problem. Standing completely aloof from the shallow and unsafe thinking of those who may have selfish ends to gain, let us bore deeply and surely into the dead truth of things. Let us search with sympathy rather than cynicism into the several tried schemes of old world medicine to see if we cannot find something there of proven worth. Let us recapture and improve the idea of hospital insurance, if for no greater reason than to try to make of it a proper answer to the crying need of those caught in the throes of catastrophic illness. And finally, let us have the greatness and the grace to be open minded for who dares predict our destiny. Of this alone am I certain: change is upon us. Either it is to have the benefit of our intelligent planning or it will march on without us. Confronted thus as we are with this present great challenge I would recall to you the wisdom which, two thousand years ago, flowed from the pen of the wise and learned Paul as his counsel to Theselonia:

> Prove all things,
> Hold fast that which is good.

324 E. WISCONSIN AVENUE.

Fetal Maldevelopment Recurring in Mother and Four Daughters

By DWIGHT S. SPRENG, M.D., CLEVELAND, OHIO

THE following cases are placed on record because of unusual recurrence of monstrosities and growth abnormalities in sisters.

A. G. was delivered April 23, 1931, of a female infant which had a thin-walled meningocele located in the lumbar region, about the size of a small peach. No nervous elements were apparent in the wall of the meningocele. Despite care, the meningocele ulcerated through about two weeks later, and the baby died of meningitis at the age of twenty-two days. She was again delivered on October 27, 1935, of a normal child.

Her sister, M. H. was delivered on February 24, 1936, of an anencephalic monster. She has not been pregnant since.

Another sister, G. H., was delivered on September 21, 1937, of an anencephalic monster which did not breathe. She has not been pregnant since.

On inquiring into the history of these patients, it is found that their older sister, the fourth girl in the family, miscarried at about three months with her first pregnancy. The mother also miscarried at about three months in her first pregnancy. We have then a situation where in the first pregnancy the mother and oldest daughter miscarried, the second daughter gave birth to a spina bifida with meningocele, and two younger daughters gave birth to anencephalic children. The mother later had five normal children, the older daughter has had three normal children, the second daughter has had one normal child, the others thus far have none. The son in the mother's family is not yet married.

The problem of inheritance of anencephaly is, as yet, unsolved, but it seems to be definitely established that an anencephalic child is more frequent in women who have given birth previously to an anencephalic child than in the average female. It, of course, is also well known that spontaneous miscarriages early in pregnancy frequently are due to abnormal development in the fetus. This is probably shown here in the mother and oldest daughter. Definitely in the three younger daughters we have monstrosities.

11420 LORAIN AVENUE.

Submitted March 30, 1938.

If ever the human race is raised to its highest practicable level intellectually, morally and physically, the science of medicine will perform that service.—Descartes.

Eternal vigilance is the price of safety.—Fetterman.

DIAGNOSIS OF ACUTE ALCOHOLISM

By MAURICE HYMAN, B.Sc., M.D., Cincinnati, Ohio

THE diagnosis of acute alcoholism, especially for medico-legal procedures, has always been a very difficult one. It has been rendered no less difficult by the fact that no one has given us a definition, in concrete terms, of what constitutes acute alcoholism, or drunkenness. Confusion is further added to the problem by the many diseases and syndromes having one or more of the symptoms usually associated with drunkenness.

The layman, the lawyer, and the physician each has his own idea of what constitutes acute alcoholism, and the reconciliation of these three ideas, particularly in court dealings, is often difficult. Furthermore, the opinions given in such cases are seldom unbiased. The layman is very apt to be influenced by personal opinion, and especially if he has some interest in the case. The ideas of the lawyer, as expressed in court, are entirely dependent upon whether he is prosecuting or defending in the case. As Spillman[1] says: "I have repeatedly observed in court that attorneys in the very nature of their job under present procedure, are no more interested in bringing out the truth as it helps their side than they are in suppressing the truth as it is prejudicial to their side." The physician is hindered in the expression of his opinion by the ravings and rantings of the attorneys and by his inability to tell his entire story to the court. To further quote Spillman, "An expert goes to the stand and is sworn to tell the truth, the whole truth and nothing but the truth. . . . It is possible for the expert under present procedure to tell the truth and nothing but the truth, but in view of the right of the opposing (or even their own) counsel to object, it is practically impossible to tell the whole truth."

The various definitions given for acute alcoholism might well be used as a thesaurus of vague terms. Purves-Stewart[2] gives us the following: "A drunk person is one who has taken alcohol in sufficient quantity to poison his central nervous system, producing in his ordinary processes of reaction to his surroundings, a temporary disorder, which causes him to be a nuisance or a danger to himself or others." In *Black's Law Dictionary* we find that "a person is drunk when he is so far under the influence of liquor that his passions are visibly excited or his judgment impaired, or when his brain is so far affected by the potations of liquor that his intelligence, sense-perceptions, judgment, continuity of thought or ideas, speech and coordination of volition with muscular action are impaired or not under normal control." Even the medical dictionaries are vague in their definitions of the term. According to the *American Medical Dictionary*, acute alcoholism is "drunkenness, or the temporary disturbance caused by the excessive use of alcohol."

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The Author

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The courts are equally confused by the term, acute alcoholism. The Pennsylvania Courts (Elkin v. Buschner) have held that "a man may walk straight, attend to business, and give no outward or visible signs of intoxication, yet if he is so affected by alcohol as to be excited, or not to possess that clearness of intellect which he would otherwise possess, he is suffering from acute alcoholism."[3] In an Ohio court (Gard v. state) it was held that a man cannot be considered intoxicated within the meaning of the law of the state, even though the odor of alcohol on the breath, a flushed face, and a disposition to talk loudly and freely are shown, unless it is further shown that he had "lost either the control of the faculties . . . or of the muscles of locomotion."[3] Perhaps the most honest, if not the most enlightening decision, is that of a Texas judge who stated, "It is difficult to draw the line on a drunk; there are various stages, such as quarter drunk, half drunk and dead drunk. There are the stages of being vivacious, foxy, tipsy, and on a high lonesome. It is about as difficult to determine when a young lady gets to be an old maid as to tell when a man has taken enough alcoholic stimulant to pass the line between jolly sober and gentlemanly drunk."[4]

SYMPTOMS AND SIGNS OF ACUTE ALCOHOLISM

Acute alcoholism is usually divided more or less arbitrarily into three stages:

The early effects of alcohol vary from one individual to another, affecting different parts of the central nervous system with varying intensity according to each person's special vulnerability. In moderate doses one of its early effects is to dull the critical and inhibitory centers in the cerebral cortex. Thus the cares and worries of everyday life are less keenly felt so that the individual becomes temporarily happier and more sociable[5]. There are often disturbances in normal

perceptions, leading to inaccuracies and wrong interpretations of what the individual sees and hears. The capacity for mental work is impaired and while the output may seem to be increased, its quality is inferior. Heise[6] has shown, by controlled typewriting experiments, that the capacity for physical work is also impaired. The reaction time is increased by as much as 0.1 to 0.2 seconds[7]. Bahnsen and Vedel-Peterson[8] in some very interesting work, have shown that with moderate doses of alcohol, the speed of reaction under visual guidance is reduced an average of 9.7 per cent, the speed of reaction under acoustic influence is reduced 17.3 per cent, the ability for concentration of attention is reduced 35.3 per cent, and manual coordination is reduced 24.5 per cent.

In the second stage a mild degree of mental confusion takes place. The emotions become dominant, the individual becomes loquacious, boastful, pugnacious, depressed, or lachrymose. There is often sexual excitement, memory is often imperfect, especially for recent events. Orientation is frequently disturbed, especially as regards time. In this stage there is usually progressive involvement of the lower nerve centers. The affection of the cerebellum is shown by a reeling gait, vertigo, sometimes with nausea (the nausea is more commonly due to gastric irritation), and nystagmus. The disturbances of the external ocular muscles, the pupillary disturbances, dysarthria, and hiccup all attest to the involvement of the ponto-bulbar nuclei. Various other physical signs appear: the pulse is usually rapid, the face is flushed, and the body temperature is slightly increased. The spinal fluid may be under normal or increased pressure. There is frequently a rise in blood-pressure. The respiration is hurried and may be irregular. Eventually, the higher psychical functions are entirely lost.

The third stage is the stage of semi-consciousness or total unconsciousness. The musculature is completely relaxed. Sensibility is at first diminished and later completely lost. The pulse may be normal, but is often slow and feeble. Respiration is slow, labored, stertorous, and may be irregular. The body temperature is lowered, the skin is pale and cold. The pupils may be dilated or contracted, and there may be inequality. They often do not react to light. The spinal fluid pressure is elevated in about 25 per cent of the cases. The spinal fluid cell count may be slightly elevated[9]. Death may take place in this stage.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis of acute alcoholism has been ably discussed by Bogen[10] and Gerendasy[11] and it seems unnecessary to repeat it here. Although a great many pathological states may be confused with acute alcoholism, a careful history and physical examination will usually clear up the diagnosis. In a few cases it may be necessary to do a few simple laboratory tests and perhaps a spinal puncture. A careful observer will have few difficulties.

TESTS OF ALCOHOLISM

As shown above, the symptoms produced by toxic doses of alcohol are many and varied, and furthermore, they differ with the degree of intoxication and with the individual. Also, it is rare for an individual to show more than a few of the symptoms and signs associated with alcoholism. In some the cerebellar symptoms predominate, in some the cerebral. Consequently. the selection of certain of the signs and symptoms to be used as tests becomes a matter of some difficulty. Moreover, the evaluation of the results of the tests used is not an easy matter, since it is only seldom that the normal actions for the patient are known.

Some of the signs used as tests are as follows:

A. Disorders of the higher cerebral centers: sensation, orientation, reasoning powers, emotions, memory.

B. Disorders of the cerebellum: coordination (muscular and speech), gait, Romberg sign.

C. Vascular and visceral phenomena: pulse, pupillary size and reaction, state of the vascular bed.

D. Odor of the breath.

E. Appearance.

F. Specific tests for alcohol in the body fluids and expired air: blood and urine[6, 7, 12, 13, 14, 15, 14, 15, 3, 10, 16,] cerebrospinal fluid[17, 18, 19,] and saliva[20].

The usual tests used to bring out the various physical signs are too well known to need reiteration. Suffice it to say that the tests used should involve actions which are perfectly normal for the patient; gymnastics, acrobatics, and various intricate maneuvers have no place in these tests. The object is to find out with what degree of accuracy the subject can perform certain ordinary, everyday actions with which he is familiar[21].

In spite of the fact that the quantitative determination of alcohol in the body fluids as a test for alcoholic intoxication has been known for almost half a century, following especially the work of Nicloux, Grehant, Widmark, and Schweisheimer, and more recently, Miles, Bogen, Gettler, and Heise, the procedure has not come into general use. While it cannot be used to the exclusion of all other tests, it is most helpful in proving that an individual has taken sufficient alcohol to produce the physical signs which are demonstrated. It is the only test into which the personal factor does not enter.

WHAT CONSTITUTES ACUTE ALCOHOLISM?

In an investigation of this type where it is desired to determine at what concentration of the substance in question a given physiological or

pathological state is reached, the first prerequisite is to define that state in unambiguous terms. As a glance at the definitions given above will show, in the case of alcoholism indefiniteness seems to be the rule, rather than the exception. The problem of choosing an alcoholic concentration in the body fluids beyond which all patients shall be called alcoholic is not an easy one. The matter has been simplified somewhat in the series to be presented because the majority of the cases were drivers of automobiles, and the question to be answered was whether or not they demonstrated sufficient signs of alcoholism to render them unfit to drive a motor vehicle. Therefore, it has seemed advisable to follow the standard set up by Carter[22]. He says, "Safe motoring depends upon a clear and alert mental outlook. Judgment must be poised, nerve cool, and the brain in a position rapidly to assimilate immediate problems and arrive at quick and accurate decisions. This nerve balance, poised as it is on the highest brain centers is the very first function to become disordered by alcohol, and long before the gross incoordination and other symptoms of intoxication develop. Once the latter are in evidence, a person so affected has been running against danger signals for a long time, but which his brain has been too dulled to read. The initial lowering of mental alertness and obscuration of judgment must always be present when there are demonstrable signs of alcoholic indulgence, and a person showing these signs is unfit to be in charge of a motor vehicle, and therefore 'drunk' within the meaning of the act."

The "demonstrable signs of alcoholic indulgence" used in this series were: an ataxic gait, a positive Romberg sign, poor muscular coordination, and poor orientation. While it is rare to find all of these signs in the ordinary alcoholic, in no case was only one of these signs found alone, so that the diagnosis never had to rest on only one finding. Congenital and acquired diseases, and old and recent injuries were ruled out by a history and physical examination. This, then is the standard I have used and by which the following cases were judged.

The method of alcoholic determination used in the following cases is the modification of the Nicloux method described by Heise[21]. To check the method, known weights of alcohol were added to a number of normal and pathological urines. In no case did the results vary more than .02 per cent from the known amount added. In no case was there more reducing substance returned than the amount of alcohol added, the small errors occasionally noticed always being in diminished return. Heise[12] has shown that the excretion by the subject of chloroform, ether, chloral hydrate, salicylates, acetone, or lactic acid does not affect the test since these substances either are not distilled over, or do not appear in sufficient concentration to affect the results. The test is rapid and simple to perform, and the results are definite and easy to read.

RESULT OF TESTS

The comparison of the results of the urinalyses for alcohol with the physical signs in 99 cases seen at the Cincinnati General Hospital during the last half of 1935 and the first half of 1936 are summarized in the accompanying table. The cases have been arbitrarily divided into three groups, depending on the alcoholic concentration in the urine. Group I includes those having a urine alcohol of .14 - 19 per cent by weight, Group II, .20 - 25 per cent, and Group III .25 per cent and over. Those having a urine alcohol of less than .14 per cent are not included in this series, because in no case was a patient in this group found to be intoxicated according to the clinical standards set up.

Signs and Symptoms	.14 - .19% inclusive	.20 - .25% inclusive	Over .25%
Number of cases	12	45	42
Pupils dilated	5	27	29
Pupils contracted	1	6	4
Pupils normal	6	12	9
Comatose	0	2	6
Ataxic gait	2	34	33
Positive Romberg sign	2	30	35
Muscular inco-ordination	1	15	15
Poor orientation	1	8	12
Number diagnosed acutely alcoholic	2	36	42

Table showing relation of signs and symptoms to percentage of alcohol in urine.

It will be seen from this table that in the .14 - .19 per cent group only two out of twelve cases were found to be intoxicated, in the .20 - .25 per cent group 36 out of 45 were intoxicated, and all those having a urine alcohol of .26 per cent or over were found to be acutely alcoholic.

While no definite conclusions can be drawn from such a small group, the series is none the less interesting. The results obtained agree fairly well with those of Carlson[13], Turner[23], Hall[4], Bogen[3], and Soltau[24].

Since some of the cases in this series were only occasional drinkers, while others were habituals, the results tend to support the theory of Gettler and Freireich[25], Bogen[3], and others that alcoholic tolerance is not due to increased tissue resistance. At a given alcohol concentration in the urine, no difference could be noted in the signs presented by the occasional drinkers and those presented by the habitual drinkers.

No single symptom was present in more than 82 per cent of the alcoholic cases—no single symptom was found to be always present, thus

emphasizing the point made by others that the examination should always be complete.

CONCLUSIONS

1. A brief summary of the signs and symptoms of, and the tests for acute alcoholism is given.

2. A clinical standard is set up whereby alcoholic drivers may be judged.

3. The urine alcohol determination is a valuable adjunct to the ordinary tests for acute alcoholism.

2146 KINDEL AVENUE.

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Cranial Trauma

Increased speed of transportation has increased the number of cranial injuries but there has been no essential change in the methods of treatment in the past five years. The primary aims of therapy are still (1) to prevent meningitis and (2) to relieve increased intracranial pressure, if present. The most important single treatment is still rest in bed. However, when serious cases are seen in shock, the usual first aid, such as elevation of the foot of the bed, external heat and intravenous glucose and blood are, of course, indicated. Lacerations must be examined for possible underlying fracture and for the escape of cerebrospinal fluid. If there is only a simple fracture or none at all, the wound can be debrided and sutured, with a drain left in the dependent portion. When a depressed, compounded fracture is found, only the obviously contaminated pieces of bone are removed before suturing if the dura is found to be intact. On the other hand, when the dura has been penetrated, more complete removal of the fractured bone is necessary. Depressed simple fractures must be elevated if they lie over a functionally important area in order to prevent future irritation.

Fractures accompanied by the escape of cerebrospinal fluid from the ear have a good prognosis if treated properly. Syringing of the ear is contraindicated since the direction of flow must not be reversed. The external canal can be flooded with 5 per cent mercurochrome, a few wisps of cotton inserted and a bandage applied. The patient is asked to lie on that side.

The escape of cerebrospinal fluid from the nose suggests a very poor prognosis and these cases present a very difficult neurosurgical problem.

The diagnosis of extradural hemorrhage is difficult but important because of the necessity of surgical intervention. In these cases, the injury is followed by a lucid interval which is succeeded by the onset of focal and progressive symptoms. The general neurological picture must be recorded at the first examination in order to establish a base-line for future changes. If focal and progressive symptoms are later noted, or if no improvement occurs after five days, exploration of the suspected area is necessary to ascertain the presence of a clot.

Lumbar punctures, including manometric readings, should be done to determine the presence of contusion or laceration of the brain. If the fluid is bloody, the tap should be repeated at intervals, taking the pressure down one-half of its difference from normal each time.—Francis C. Grant, M.D., Philadelphia, Pa.; Jr. of Conn. State Med. Soc.; Vol. 2, No. 4; April, 1938.

ABDOMINAL PREGNANCY WITH MACERATED FETUS

Suppuration and Perforation into the Urinary Bladder

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WHILE references to abdominal pregnancy with complications are fairly common in the literature, the following case presents such unusual features that we feel justified in calling attention to it.

CASE REPORT

Mrs. E. J., a 37 year old negress, was sent into Miami Valley Hospital on December 19, 1936, by the referring physician as a case of renal and vesical calculi. Complaints of two months duration were dysuria, hematuria on one occasion, milky urine, occasional sudden obstruction to the passage of urine, passage of gravel, and five attacks of severe colicky right flank pain radiating down to the symphysis pubis and along the posterior aspect of the right thigh. Mild malaise had been present but no chills or fever. The last menstrual period was in May, 1936. No bleeding or vaginal discharge had occurred since. The previous menstrual history was normal. The patient assumed she had reached the menopause since her mother stopped menstruating at 36 or 37 years of age. Further history was irrelevant.

Her past medical history was not remarkable. Menstruation began when the patient was 14; the periods were regular and normal until May, 1936. She had one child born 11 years ago who is living and well. No history of operations or miscarriages was given.

Physical examination revealed a symmetrically developed, slightly undernourished adult woman. Her pulse was 76, her temperature 98, and her blood pressure 135/80. The head, neck, lungs and heart were negative for pathology. Abdominal examination disclosed tenderness, dullness, spasticity and fullness for 4 cm. above the symphysis, but no definite mass could be felt. The extremities were normal.

When pelvic examination was attempted the patient said she had to urinate, but could not because a stone was occluding the urethral orifice. A small irregular object, apparently bone, was seen blocking the urethral orifice. This was removed with a forceps. Eventually four more small (2-5 cm.) fragments of bone were removed, one of which looked like the proximal end of a fetal femur. The cervix was normal in size but was displaced far posteriorly. A firm indurated mass was felt over the right side of the bladder area extending well up toward the tubo-ovarian region.

At the time of her admission the white blood cells were 5,600, the red blood cells 3,550,000, the hemoglobin was 70 per cent and the sedimentation time 30 minutes. The Wassermann reaction was negative. Urinalysis on several occasions showed: reaction alkaline; specific gravity 1.025; albumin small amount; sugar negative; blood graded 4 and pus graded 4. A roentgenogram of the pelvis showed an accumulation of partially ossified and calcified material on the right about 8x10 cm. in size. A pyelogram with intravenous dye showed a normal kidney outline with a normal pelvis on each side. The Ascheim-Zondeck test was negative for pregnancy.

The cystoscopic report was as follows: "Marked bullous edema of the right upper quadrant of the bladder with compression of the bladder toward the left. The fluid from bladder lavage had the very definite and characteristic odor of necrotic bone."

The diagnosis was: (1) Infected macerated abdominal fetus with perforation into the bladder with cystitis or; (2) Infected dermoid cyst with perforation into the bladder with cystitis.

A transfusion of 500 cc. of citrated blood was given on December 29, 1936.

The operation: The following day the abdomen was opened by a low median incision. A mass of infected tissue containing dismembered fetal bones about 7½x15 cm. was found posterior to the right broad ligament and extending into the cul de sac. Several loops of small bowel, and the cecum were intimately connected to the mass by dense adhesions. The intestines were separated from the mass, and the abdominal contents carefully walled off by wet packs. There was a sinus tract perforating the right broad ligament near its base and entering the upper right quadrant of the bladder. Because of the dense adhesions to the surrounding structures it was impossible to remove the mass in one piece.

The right adnexa, a portion of the right broad ligament, and the mass of necrotic bone were removed. A portion of the bladder was excised, the defect inverted, and the bladder closed in three layers. A cul de sac drain was inserted, the

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Submitted March 3, 1938.

omentum brought down, and the abdomen closed. A retention catheter was placed in the bladder.

The patient ran a septic postoperative course having periods of persistent hiccoughing, vomiting and abdominal distension. The urine continued to be loaded with pus cells but became free from blood. Blood work on the fifth postoperative day showed: White blood cells 14,360; red blood cells 4,110,000; hemoglobin 54 per cent; filaments 1; nonfilaments 85; lymphocytes 12; monocytes 2. The patient died on the seventh postoperative day. Autopsy permission was denied.

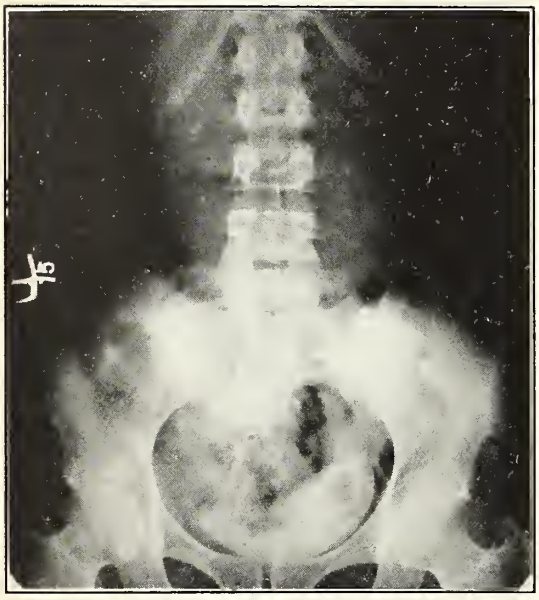


Fig. 1. Intravenous pyelogram showing mass compressing bladder toward left. Two bones are apparently entering the bladder to right, while two fetal bones can be seen behind the bladder on the left.

The pathological report by Dr. W. M. Simpson follows: "Lemon-sized mass of firm grayish-white tissue covered with organizing bloody exudate. On section there are areas of calcification, multiple pieces of skeletal bone. The large sinus tract is lined by heavy layers of organizing pyogenic granulation tissue and contains numerous small spicules of necrotic bone. The sinus tract penetrated large bundles of smooth muscle and connective tissue (probably bladder wall?)."

In a review of the literature, no similar case could be found of an extra-uterine pregnancy resulting in suppuration and consequent perforation into the urinary bladder. F. Schewket[1] reported the case of a 30 year old woman who felt no fetal movements after the seventh month of pregnancy, but during the tenth month noticed an inflammatory zone below the umbilicus which opened forming a fistula. The fistula discharged pus and air bubbles for several months until finally a fetal tibia was discharged. The fistula was dilated and the fetus extracted. The patient recovered.

In 1932, Clark[2] reported a case of interstitial pregnancy which ruptured into the sigmoid. The sigmoid was adherent to the fundus of the uterus as a result of a previous operation.

Gustafson, Meredith and Herd[3] also report the case of a negress who passed fetal bones through the rectum. Although she was quite ill for a time she recovered and refused further treatment.

Benhan[4] in 1876 reported a case of extra-uterine pregnancy with discharge of a macerated five month fetus by rectum.

There have been many cases reported of suppurative abdominal or pelvic processes perforating into the bladder. However, R. Brown[5] in 1933, while reporting a case of diverticulitis of the sigmoid with perforation and formation of a pelvic abscess and a recto-vesical fistula says, "While recto-vesical fistula is not particularly rare, search of the literature would lead us to believe that the bladder is rarely the seat of rupture of a pelvic abscess into it, especially when the abscess lies within the peritoneal cavity."

In 1933, in a review of cases of suppurative diseases of the female organs perforating into the bladder, F. Durst[6] cited the following: "Goth of Kolosvar found one case of perforation into the bladder among 700 cases of adnexitis. Acs found five such cases among 818 cases of inflammatory adnexal disease. In 1911 Zushelle collected 19 cases from the world literature. Delbet who collected 1,000 cases of suppuration in the pelvis found that perforation occurred into the rectum in 12 per cent, into the bladder in 5.22

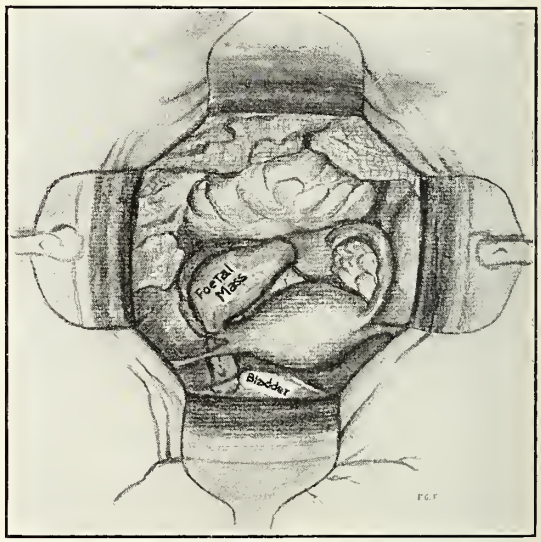


Fig. 2. Diagramatic sketch showing relation of mass of fetal bones to pelvic structures with sinus tract entering the bladder.

per cent, into the vagina 4.59 per cent and through the skin in 3.22 per cent. According to Freund, perforation into the bladder is most frequent in septic conditions, next in tuberculous conditions and least frequent in gonococcal processes. Others disagree, among them Levitsky, who found no cases of perforation into the bladder in 4,000 cases of puerperal disease."



Fig. 3. The fetal bones removed and arranged in their approximate anatomical order.

In 1913, J. Heller[7] collected more than 40 cases of infected dermoid cysts which ruptured into the bladder, 16 of which were in males. In 1933, Ewell[8] reported a case of dermoid cyst perforating into the urinary bladder causing profuse hematuria and from his survey of the literature concluded that perforation of the urinary bladder by lesions in adjacent organs is usually a complication of serious nature.

In view of the serious urinary tract complications present, it is remarkable that the patient's symptoms were comparatively mild.

We realized that we were faced with a surgical problem of the first magnitude. We were dealing with a badly infected bladder, connecting by a sinus tract with a septic intraperitoneal mass. We were unfortunate in not being able to isolate and remove the involved tissue en masse.

Because of the proximity of the right ureter to the sinus tract it is quite possible that the patient developed an ascending pyelonephrosis. We are confident that she did have a peritonitis. It is regrettable that consent for autopsy could not be obtained.

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Effeminizing Ovarian Tumors

The incidence of these growths clearly divides them into three groups for they are seen in:

(1) Pre-adolescent girls in whom precocious puberty is produced as is evidenced by enlargement of the breasts, growth of pubic hair and maturation of the genitalia. Not infrequently pseudomenstruation occurs.

(2) Adult women in whom the symptoms of excessive production of estrogenic substances are evidenced by periods of amenorrhea and irregular bleeding, enlarged uterus and hyperplastic endometrium.

(3) Post-climacteric women in whom production of folliculin produces a sense of rejuvenation and the uterus instead of being senile and atrophic, enlarges. The endometrium becomes hyperplastic and metrorrhagia takes place, sometimes in a somewhat rhythmic manner.—Ralph H. Chaney, M.D., and Robert B. Greenblatt, M.D., Augusta, Ga.; Jr. of the Med. Assn of Ga. Vol. XXVII, No. 3; March, 1938.

Use of Urea in Treatment of Wound Infections

In light of clinical experience with the use of urea in solution it can safely be assumed, I believe, that urea hastens healing of infected wounds, being efficacious where other solutions fail. Its application is cheap, it does not irritate the surrounding tissues and it obliterates the odor. Its action is probably partly bactericidal, but mainly mechanical in character, as it removes debris, encrustations and dead tissue, which mechanically and by harboring bacteria deter healing. In strengths of 30 per cent or above, the urea solution finds its greatest value, and is not efficient in the 2 to 10 per cent strength in which it was originally used. Urea crystals may be used just as effectively in open wounds, with equally good results, and it appears that in the use of urea, either in concentrated solution or in crystal form, we have a valuable contribution in the treatment of infected wounds. —George E. Baker, M.D., Casper, Wyo.; Rocky Mountain Med. Jr., Vol. 35; No. 4; April, 1938.

Alcohol and auto control are incompatible. A machine driven by a man who has had a few drinks is more dangerous than a car without brakes.—Fetterman.

THE ROUTINE TREATMENT OF DIABETES MELLITUS

By HENRY J. JOHN, M.D., CLEVELAND, OHIO

BEFORE one can treat a patient with diabetes, one must be sure of the diagnosis. This needs to be emphasized because many mistakes are made in practice. Glycosuria itself does not constitute sufficient evidence on which to base a diagnosis of diabetes. Of 100 persons with glycosuria, 66 are not diabetic. On the other hand, glycosuria together with the cardinal symptoms is usually adequate proof of the presence of diabetes. The weak point of this is that early in the course of the disease, the cardinal symptoms may be absent. A patient may have glycosuria, and if one were to wait until more serious symptoms develop, much damage would have been done, and the physician would have missed the best chance to do most for the patient. Early diagnosis offers the best opportunity to the patient, and it behooves the physician to make the diagnosis as early as possible.

Yet if one were to treat every patient with glycosuria as diabetic, one would be making a mistake in two of every three cases. A batting average of 33 per cent is pretty low, and even a layman will not accept or be satisfied with so little efficiency. A patient who has been treated for diabetes, has no very friendly feeling for his physician when he finds that he has never had the disease, and what is more, he never stops talking about it.

What is to be done, then, when one is confronted with a case of glycosuria? The blood sugar estimation will give additional information. To take a fasting blood sugar on such a patient again involves some difficulties. In a frank case, or a well advanced case of diabetes, the diagnosis will thus be confirmed, for the level of the fasting blood sugar will be high. In the early or mild case of diabetes, the information may be misleading. In such instances, the fasting blood sugar will remain at a normal level for a long time, and only when the diabetes has advanced, will the fasting blood sugar rise. For that reason, a fasting blood sugar determination can not be relied upon for the diagnosis of diabetes in the mild and early cases which would thus be missed.

The thing to do when one wants to ascertain whether or not a patient is diabetic, regardless of whether he has or has not glycosuria, is to give him a heavy carbohydrate meal and then check the blood sugar two and a half hours later. If the blood sugar is normal at that time, it is safe to assume that the patient does not have diabetes. If the level of sugar is high, the patient is diabetic. No one with diabetes, no matter how mild the disease, will show a normal blood sugar two and a half hours after a heavy carbohydrate meal. My directions to patients who come up for diagnosis are as follows: In the morning eat grapefruit with a great deal of sugar; oatmeal with plenty of sugar and cream; pancakes with syrup; coffee with sugar and cream. This constitutes a meal which is heavy in carbohydrate, yet not unpleasant to take, in contrast to the glucose tolerance test. It is less expensive and less time consuming and for all practical purposes adequate.

Having thus ascertained the condition of the patient and having found out that he is diabetic, the next problem is that of treatment. Shall the patient be given a diet, shall he receive insulin, and if so, how much? Is it necessary to place him in a hospital on a definite regimen which can be closely controlled and thus to solve his problem with precision and accuracy?

The one thing to consider in a case of diabetes is that it presents a life-long problem. The person before you will be a diabetic the rest of his life. You and I have taken time and money to prepare ourselves for our life's task. Now the patient too has a life task before him, namely to handle his diabetic problem in such a way that it will not be a detriment to him as years go by and involve him in serious difficulties or dependency. Consequently he too should prepare himself to take care of that problem in the best manner. This requires a certain amount of study and application. The problem of such a patient is not what will happen to him within the next six months, for in six months the chances are that not even Christian Science can wreck him, but, the problem is where will he be and what condition will he be in ten, fifteen or twenty years hence. Anyone can palliate such a patient temporarily with almost any kind of treatment. But diabetes has to be considered in terms of decades and not of months.

The adequate treatment of a patient with diabetes is accomplished either by diet, or by diet and insulin. It is impossible to make sweeping statements or to set forth rigid formulas for the diet, for all types of individuals are dealt with. These include the lean and the fat, the under-

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nourished, the man at hard manual work, the man leading a sedentary life, the young and the old. Good sense and discrimination are necessary in order to do justice to the medical problem. In dealing with an obese person, it stands to reason that an attempt should be made to reduce the weight. This is required to make him more comfortable and to teach him rational living and thus prolong his life, to eliminate complications and to render his disease milder. He is fat because of overeating and it was this overeating which precipitated the diabetes. A basal metabolism test and the clinical examination will tell quickly whether or not it is normal or whether he has a hypothyroid condition. In such a case, thyroid extract can be administered along with a low-caloric diet. A 1400-calorie diet will bring down the weight.

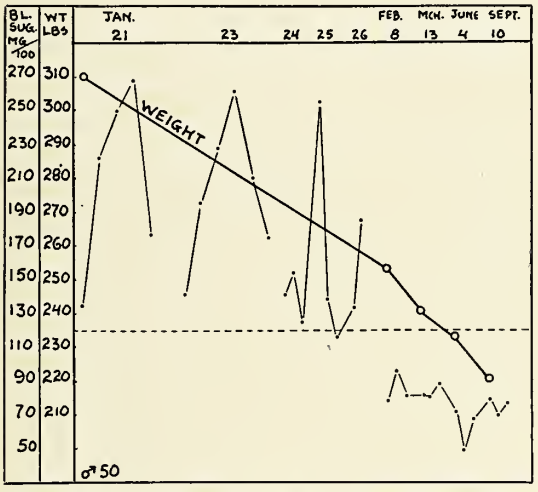


Figure 1. The effect of diet in an obese patient with diabetes.

Diet alone will accomplish much in weight reduction within a few months, as figure 1 indicates. This man, aged 50 years, spends much of his time travelling in connection with his business. This, as you well know, does not offer conditions conducive to dieting. At the beginning of treatment, he weighed 310 pounds. There was a steady decrease to 222 pounds. Will he ever go back? Ask any obese patient who succeeded in reducing and the answer will always be the same. The patient feels so much better, he has so much more energy and endurance that there simply is no comparison, for life has become a new and worth-while thing. It is interesting also to note what dieting has accomplished for the diabetic condition in this instance. The patient was in the hospital for five days and ever since the blood sugar, morning, noon and night, is at a low normal level.

With such patients, then, who need a low-caloric diet on account of obesity, no insulin is required, as a rule, for the diet being low controls the diabetic condition adequately. On the other hand, there are patients in whom diet alone will not accomplish much, and considerable quantities of insulin have to be used right from the start. Each case must be individualized and the regimen has to be adjusted according to the needs of each particular patient.

I have just illustrated the case of an obese diabetic who, by proper dieting, was able to reduce weight and thereby improve the diabetic condition. There are other patients who are undernourished, either because of untreated diabetes or because they have had inadequate treatment with a too meager diet. I recall one such instance in a woman 50 years of age, who had severe diabetes and was extremely emaciated. She weighed but 85 pounds when I first saw her in 1923. She came to Cleveland, as she expressed it, to die. Naturally a patient of this type could not be treated with a low diet, for she needed liberal quantities of food. However, in as much as the diabetic condition was severe, she could not tolerate a liberal diet, for that would have meant aggravation of the diabetic condition with extreme loss of sugar in the urine and consequently a further loss of weight. In such a case, it is necessary to resort to the use of insulin in addition to a liberal diet. Sufficient insulin has to be administered to enable the patient to utilize the food received. When this is done, there can be but one outcome, improvement and a gain in weight. This particular patient gained weight quickly up to 175 pounds and today, 15 years later, is in a good condition, enjoys health and life and carries on the same activities as any normal woman.

For a man doing office work, I have always felt that a diet of 1800 calories was adequate. This is composed of 140 to 180 grams of carbohydrate, 60 to 80 grams of protein, and 111 grams of fat, which makes a nicely balanced and palatable diet. I have had sufficient proof that such a diet is adequate for energy and maintaining normal weight. That, after all, is a good criterion to go by. On the other hand, this number of calories is not sufficient for a laborer. He has to have a diet of higher caloric content, 2200 to 2500 calories, or more, with 140 to 200 grams of carbohydrate, 80 to 100 grams of protein and the rest fat. By observing such a patient for a time, it is possible to determine just how much food he should have. One must not forget that adequate dosage of insulin has to be used in order to enable him to get the full benefit from what he eats and to see to it that it is actually utilized and not a large portion of it excreted. In the severe cases of diabetes, I have allowed a loss of sugar in 24 hours up to 10 grams. It should not exceed this amount. If it does, then a readjustment in the regimen is necessary.

Younger patients and children form a separate

group. Their problem has to be managed somewhat differently from that of the adults as their requirements are different. An adult needs enough protein, about 1 gram per kilogram of body weight, to cover his metabolic needs. A child has to have enough protein to cover these same metabolic needs, plus protein required for growth. Hence the child utilizes about three times as much protein per kilogram of body weight as the adult. In addition, a child is extremely active, and uses a great many calories in energy output. Therefore, a diabetic child should receive a greater number of calories in proportion to the body weight than does the adult.

Low-calorie diets for diabetic children are never advisable. They stunt the growth and generate serious psychologic problems. If a child is sent home from the hospital on a diet of inadequate caloric content, and hence is hungry, do you suppose for one moment that the child will stay within the prescribed limitations? You and I would not, and we can not expect the child to. One of two things happens. Either by continuous whining and complaining, the child persuades the mother to give him more food, or, if this does not work, the child will find other means of getting food. When this happens, the morale is broken. This possibility must always be anticipated, and to avoid it in a sensible manner one must consider the child as a person, and not as a pathologic specimen. The one thing to remember always is that it is the patient who must be treated, and not the disease. Otherwise many serious mistakes will be made.

Children between the ages of eight to twelve should have an 1800-caloric diet, much like that of the adults. Milk is always planned in the diets of children. Those from 13 to 18 years old get anywhere from 2,000 to 2,500 calories and from 70 to 90 grams of protein, with 140 to 200 grams of carbohydrate. To judge the number of calories needed for a child by means of his age and weight is not adequate. Other factors, such as activity, the degree of severity of the disease, etc., should always be considered. In planning diets for children, I feel that it is better to err on the side of too much, rather than too little.

Often the reason for a child's stealing food is not his rebellious spirit, but a faulty plan of management. I wish that each one of you could experience the feeling of hypoglycemia, for then you would understand better what I mean. The feeling is that of extreme nervousness which is approached most nearly by the sensation following an injection of adrenalin, the extreme fatigue, the ravenous hunger which hypoglycemia creates. One could steal food from a starving man at such a moment. Is it any wonder then that if the insulin dosage is too large and the child is thus thrown into a hypoglycemic state, he will steal food? It is no fault of his. He has to have food. It is merely the instinct of self-preservation, for nothing but food will give him relief. One can never blame a child for stealing food until one has made sure first that the fault is his. A child knows instinctively what the situation is and will never forgive the physician who has brought this condition about and then blames him for helping himself to food. To treat a diabetic child successfully, it is necessary to keep his confidence and friendship. Once the child begins to look upon his physician as his enemy, it is practically impossible to regain his confidence and cooperation.

The insulin requirement in children is relatively higher than it is in adults. This is logical, for in the young, there is a gradual and constant change in the state of affairs. Growth, excessive energy expenditure, childhood infections, etc., all produce pronounced effects on the diabetic conditions. Some time ago I studied a series[1] of children whom I had followed over a period of years and compared the findings with those in a group of adults in whom diabetes developed after the fiftieth year. When diabetes develops late in life, the chances are that the disease will be mild, and with reasonable control it tends to become milder. The majority of such patients require less and less insulin as time goes on, or their insulin need remains stationary. The children, on the other hand, require more and more insulin as time passes. We do not know what the final answer will be in the case of children, for we have had a chance to observe the effects of insulin in the children only a little more than a decade. Whether, when diabetes develops at an early age, the insulin requirement will continue to increase, and as the patient reaches maturity, whether the dosage will become stationary, or whether later there may be a decrease, can not be stated definitely as yet. Some 10 to 15 years hence, the answer may be available.

Although diabetes in older persons usually is mild, it can become severe through neglect. Many of these patients get along well on diet alone, without any insulin. In planning the diets, however, one must be sure never to starve an old person or an obese person. There is a great danger in this. The old person becomes debilitated quickly and in the fat person acidosis can be precipitated through starvation.

In general, the place to start the treatment of a diabetic patient, I feel, is in the hospital. Seven to ten days straightens out the problem of most any diabetic and the physician by that time knows the patient's tolerance, just how much, if any, insulin is required and whether or not the patient is sensitive to insulin. Furthermore, the patient has a rest and a chance to learn something about his condition. He ceases to be afraid

of insulin and if he is fortunate enough to have an insulin reaction while in the hospital, he will recognize it at home and know how to handle it. I invariably place a manual on diabetes in the hands of each new patient. He reads it with the utmost interest. He begins to learn something about the disease, what is being attempted for him and why. His reaction to his problem becomes entirely different. He begins to ask intelligent questions, and focuses his entire attention on the management of his condition. No diabetic can know too much about diabetes. The more he knows, the easier it is for him to care for himself.

After the patient leaves the hospital, enlightened and encouraged, I see him within three to four weeks. My recheck on every diabetic consists of a blood sugar determination three times a day, before breakfast, before lunch, and before dinner, with urinalysis at the same time, and often a 24 hour urine specimen also. Only this gives adequate information. It tells not only what the fasting blood sugar is, but what the morning dose of insulin has accomplished by noon, whether it has brought the blood sugar down near the normal level, or whether it still is high. If the patient receives a dose of insulin at noon, the test shows what this has accomplished for him by supper time, whether or not it has brought the blood sugar level close to normal. The fasting blood sugar tells what the evening dose of insulin has accomplished. To do most for the patient, it is necessary to know not only what the fasting blood sugar is, but what it is throughout the day. The 24-hour urine shows exactly how much sugar is being excreted, although the blood sugar level is also a pretty good guide to this.

There are many adverse criticisms regarding large numbers of blood sugar estimations. I fully agree when I see so often how the blood is taken. I too would seriously object to being bled under these conditions. The big and dull needle which simply tears the vein, for often it is larger than the vein itself, the clumsiness and inexperience of the performer, the pain that accompanies such a procedure and the repeated attempts to get into the vein,—these are all extremely objectionable features. And yet to take blood from a patient is the simplest thing in the world if it is done properly. The patient rarely feels it. All one needs is an ordinary hypodermic needle, gauge 26, half an inch long. With this you can get all the blood you need, for only 1 cubic centimeter of blood is needed to perform the blood sugar test. Why take 8 to 10 c.c. of blood and throw the rest away? The bevel of the needle should be up and not down, so that the blood can enter freely into the needle. If the bevel is down it is likely to suck up the wall of the vein against the opening, which prevents blood from entering. I have taken blood through vene-puncture on babies three days old. And the criteria I have that the vein is not damaged if one uses proper technique are the observations on the case of a little girl, who was three years old when diabetes first developed. I treated her in the hosiptal for years, during which time she had but one accessible vein, and that vein was subjected to 1,676 venepunctures during a period of nine years and still is in perfect shape. This finding can be corroborated by anyone who uses the proper technic.

Coma presents an emergency problem. In a recent publication[2] I have discussed this subject in detail, so I want here merely to point out the commonest mistake in the treatment of diabetic coma. That is mistaking insulin shock for coma. They are really not alike in any way. The only thing that they have in common is the unconsciousness. A patient in diabetic coma is dehydrated, with a parched mouth and a dry skin. A patient with insulin shock is usually drenched with perspiration, the skin at least is moist and the mouth as well. All you need to do to differentiate the two conditions is to look at the patient. A diabetic patient drifts into coma slowly over a period of hours and often days. The patient goes into insulin shock quickly, usually within a few minutes. That much history you can always elicit from the relatives and that is all you need. One question to the family and one look at the patient, and no elaborate examinations and testing of the urine and blood are necessary. Postpone chemical studies, but act in the meantime. If there is any doubt as to which of the conditions it is, give 5 to 10 c.c. of a 50 per cent solution of sterile glucose intravenously. If the unconsciousness is due to insulin shock, the patient will emerge within three to five minutes. If the patient is in coma, you have done no harm, but will treat the condition from then on with injection of sodium chloride solutions and insulin.

Infection always play havoc with diabetic patients. They usually affect the diabetic state so that more insulin is required during the period of the acute illness. During an infection, if the patient is not well protected by an increased insulin dosage, he is likely to go into acidosis or even coma. The fact that the patient is not eating well or is vomiting is no reason for stopping insulin. During the course of an infection, the patient requires two or three times as much insulin as formerly for a short time whether he eats or not. As long as there is life, the body burns calories and these require insulin for their proper combustion. When a patient eats, the food supplies the calories, when he does not eat, the body reserves supply these. In either case, it takes insulin to insure their combustion, as well as riddance of the accumulated katones. Never jeopar-

dize a patient's chances by withdrawing the insulin during the course of an acute infection.

Is there any danger to the diabetic patient from hypoglycemia? I feel quite certain that there is little or no danger. When we stop to think how many thousands of people in the past 13 years have passed through the most extreme hypoglycemic states because of overdosage of insulin, and the infinitesimal number of accidents, I fail to be convinced of its danger. I do not advocate carelessness or the indiscriminate use of large quantities of insulin, but merely states this point in order to avert the fear of insulin which is so rooted into the minds of many of our profession and which has no doubt cost many lives. There

TABLE 1.

GLYCOSURIA DISCOVERED DURING ROUTINE EXAMINATION IN PREGNANCY

Author	Year	Cases	Per cent with Glycosuria
Crock	1925	548	30
Blot	1856		50
Williams	1925	500	13.6
Smit	1927		10
Reichenstein	1925		12
Lepine	1909		40
Stopler		32	18
Mann	1913	30	3.3
Williams	1907	3000	0.8
Faught	1926	100	4.3
Rowe	1931	100	18
Labbe and Chevski	1926	53	6
Woylff			33

are only two types of patients to whom insulin must be administered with great care. These are the old people with arteriosclerosis and the patients with angina or other cardiac damage. In these, the precipitation of hypoglycemia may be a serious matter. Years ago, when insulin was first discovered, and when none of us knew any thing about it, but were trying to work out its rationale and its limitations, I gave a little girl four years

TABLE 2.

THE RENAL THRSEHOLD N PREGNANCY
John

Blood Sugar (mg. per 100 c.c.) Renal Threshold	Cases	Per cent
60-70	2	
70-80	2	
80-90	2	
90-100	1	
100-120	6	
120-130	2	
130-140	3	
140-150	1	
	19	76
150-160	2	
170-180	3	
200-210	1	
	6	24

Average Renal Threshold—123 mg. per cent.

of age 100 units intravenously in the morning and 100 units in the evening each day for six weeks. During this time she never had a reaction. Another one of my patients, a middle-aged man, used by mistake 120 units twice a day for a month, and was in shock nearly all the time. At the end of a month I was able to discontinue all insulin and the man was, so far as I could ascertain, cured of the diabetes. These are, of course, extreme instances, for now I rarely give more than 20 units per dose. But it does give an indication of how far it is possible to go without serious consequences.

TABLE 3.

MORTALITY OF DIABETIC MOTHERS BEFORE THE DISCOVERY OF INSULIN

Author	Year	Percentage mortality	
Hirschfeld		50	
Williams	1926	27	23 additional within two years
Hansen	1928	17	
Colorni		46	— in first two years
Wiener	1923	30	21 additional in two and one-half years postpartum

Glycosuria is a fairly common finding in pregnancy. As you will note from Table I, in which are shown the data gathered from the world literature, the percentage is fairly high. Often the presence of sugar in the urine is disregarded by the obstetrician which is unfortunate. But it is just as faulty to place such a patient on a restricted diet because of glycosuria. After all, in any case of glycosuria, whether in pregnancy or otherwise, there is but one point of importance, namely, is the glycosuria due to diabetes or is it not? In other words, a diagnosis of the condition is absolutely essential.

Glycosuria of pregnancy is often dismissed with the glib statement, "sugar of milk." But Rowe[3] has shown that there is no such thing in the first six or seven months of pregnancy. Sugar of milk appears in the urine first in the last stages of pregnancy or else during lactation. This is an important point to remember. Glycosuria in the first part of pregnancy is a true glycosuria (melituria) and needs investigation. It may be due to a low renal threshold, as can be noted in Table 2, which shows, in a rather small series of pregnancy cases that in 76 per cent the threshold was below 150 mg. per cent and only in 24 per cent was it above 150 mg. per cent. If the condition is due to diabetes, it is important to recognize it and treat the patient as a diabetic, in order to carry her safely through pregnancy and parturition. If this is not done, there is danger for the fetus as well as for the mother. The mortality of diabetic mothers in the preinsulin era was high as is shown in Table 3. It will still be high if nothing is done for the patient. With treatment, however, the woman is quite safe. A diabetic mother who is not properly cared for, naturally will have considerable hyperglycemia. Hyperglycemia stimulates the islands of Langerhans in the fetal pancreas. The result is hyper-

trophy which means hyperfunction. The pancreas of the fetus tends to secrete enough insulin to take care of the diabetic mother. This can be seen by the lessened insulin requirement as the fetus develops and by the increased need for insulin in the mother after delivery. But once the fetus is severed from its mother's womb, there no longer is any need in the baby for the excessive insulin secretion. A condition of hyperinsulinism exists thus which may cause the death of the child in insulin shock. Such cases have been reported in the literature. The babies born of diabetic mothers also are above average weight.

One can not depend on the symptoms to make the diagnosis in these cases in which glycosuria is present, for the symptoms can be very misleading. The following cases illustrate this point:

A young married woman, aged 24 years, whom I saw because of glycosuria, had no history of diabetes in the family. She had been married for six years, had two children, and the younger child was five months old. During pregnancy, her obstetrician had found glycosuria about a month before parturition and had told the patient that it was likely sugar of milk and no further attention was paid to it.

Since then, the patient had had no special symptoms until a week before she consulted me, when she had begun to have excessive thirst and frequency of urination. She consulted her family physician who found glycosuria and who prescribed a diet which she had followed for three days just before I saw her. At this time, her fasting blood sugar was 107 mg. per cent, there was a slight trace of acetone in the urine and glycosuria, grade 1 plus. Although her blood sugar was normal when I first saw her, in view of the fact that the patient had had glycosuria just before parturition and had so recently shown definite clinical signs of diabetes, a glucose tolerance test was done, which yielded the characteristic curve of diabetes as shown in the upper part of Figure 2.

The second patient was a young married woman, 24 years of age, who was in the third month of her first pregnancy. There was no familial history of diabetes. She was referred to me by her obstetrician who had found sugar in the urine two weeks before. The frequency of urination had been increasing, so that when I first saw her she had to get up every two hours during the night. The level of the fasting blood sugar was 73 mg. per cent. Three days later, I made a glucose tolerance test, the results of which are shown in the lower curve of Chart 2. This is a normal curve, which shows that this patient had a low renal threshold for sugar.

The first patient had glycosuria and symptoms of diabetes which, however, remained unheeded by her obstetrician. The second patient had classic symptoms of diabetes with glycosuria and yet was not a diabetic. They both had glycosuria. Glycosuria is but a symptom and not a diagnosis.[4]

Hyperthyroidism is another condition in which glycosuria and even hyperglycemia may be present. In Table 4 the incidence of glycosuria in hyperthyroidism as reported by various authors is shown. This ranges from 2 to 25 per cent. When the problem is gone into more carefully and the blood sugar is determined, as shown in Table 5, the figures range from 0.5 to 90 per cent of non-physiological hyperglycemia.

In 1932, I analyzed a series of 9,000 cases of thyroid disease from the records of the Cleveland Clinic.[5] Of this group, 620 patients, or 6.88 per cent, showed some degree of non-physiological hyperglycemia (either fasting or two and a half hours or more after eating). When the 620 cases were followed further over periods as long as 10 years, I found that in some instances the hyperglycemia was present only in the primary examination and that in some others the hyperglycemia disappeared without any medication. Consequently these cases were not included in my consideration. In some others, the patients have not been observed for a long enough time to be included in the series. In other instances, inadequate data were available and for that reason they were excluded. Intensive observations over a period of from one to ten years were made on

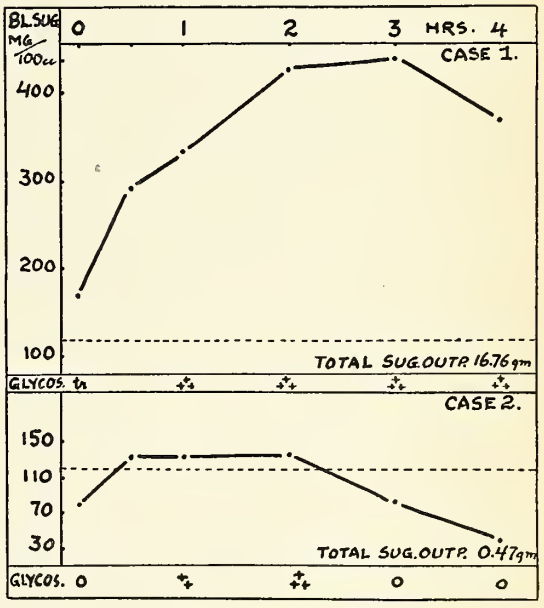


Figure 2. Relationship of glycosuria and blood sugar curve in two pregnant women with glycosuria.

166 cases. All of these showed a definite disturbance of carbohydrate metabolism. By a very conservative estimate, however, I should say that about 200 cases showed what might be called definite hyperglycemia, simulating that in diabetes. In some of these cases, the hyperglycemia was purely functional in type and therefore disappeared in a few weeks or months after thyroidectomy on dietary treatment alone or combined with insulin, but, as further experience showed, the hyperglycemia would not have disappeared in all these cases without such treat-

ment. In the total of 620 cases of thyroid disease in which hyperglycemia was present, it remained in 30 per cent and disappeared in 70 per cent. This makes the incidence of diabetes in this series of thyroid cases 2.1 per cent, a figure which is close to the average incidence (2.3 per cent) of diabetes in cases of hyperthyroidism as reported in the literature. (Table 6). Thus of this series, approximately 200 patients remained diabetic and had to be treated as such and 35.7 per cent of these are still taking insulin in order to control the diabetic state.

TABLE 4

GLYCOSURIA IN HYPERTHYROIDISM

Author	Cases	Per cent with Glycosuria
Marsh		2.0
Joslin and Lahey		
Primary hyperthyroidism	228	38.6
Secondary hyperthyroidism	83	27.7
Nontoxic goiter	189	14.8
Schulze	16	25.0
John	100	19.0
Bryan		
Toxic adenoma	224	3.2
Nontoxic adenoma	982	1.0
Exophthalmic goiter	361	1.1

When a diabetic patient presents a surgical problem, the treatment of the diabetes has to proceed along the usual lines. A reasonable control is all that is needed. Within a day or so, with close observation and ample laboratory tests, operation can be performed with safety. However, there are emergency operations. What is to be done in such an instance? Waiting may endanger the patient's life by a possible bursted appendix or peritonitis. A surgical emergency is an emergency and has to be dealt with promptly.

TABLE 5

HYPERGLYCEMIA IN HYPERTHYROIDISM

Author	Cases	Per cent with hyperglycemia
Fitz	1800*	0.5
Wilder	2340*	0.6
von Noorden and Isaac	1000	0.6
Wilder	1131‡	2.0
Sattler		3.0
Lund and Richardson	29	3.4
John	9000	6.88
John (1928)	3335	8.5
Mojarova	84	25.3
Flesh		60.7
Geyelin	27	90.0
Total	18,746	

* Exophthalmic goiter

‡ Toxic adenoma

When the patient's problem can not be evaluated before an operation, this can be done afterwards. It takes but 20 to 30 minutes to make a blood sugar test, and it takes longer than that to prepare a patient for an operation. Consequently while the patient is being prepared, the level of the blood sugar can be determined. If this is high an appropriate dose of insulin can be administered immediately, before he goes on the operating table. As soon as he returns to his room, either sodium chloride solution or sodium chloride and a 5 per cent solution of glucose and insulin can be given by hypodermoclysis. A blood sugar test hourly for four or five hours will yield the necessary information as to how fast to proceed and how much insulin to use.

Occasionally, following operation or coma, there is another complication, oliguria or a complete suppression of urine. This is serious. I have found that Fisher's solution given intravenously worked each time I met with such a complication. Recently I have been told that a concentrated solution of glucose renders equally satisfactory results. One should also be on the watch to prevent overdistention of the bladder and catheterize before this occurs.

In older patients with diabetes, vascular diseases of the extremities often prove a painful and a trying condition. The sclerosis of the larger vessels causes inadequate circulation. This sclerosis can not be changed. It will always be there. However, nature in its practical adaptability meets this unfortunate situation by increasing the collateral circulation and thus saves the limb. This takes a long time to accomplish, naturally, and the patient suffers in the meantime. Fortunately, the leg pump now furnishes a means of helping nature in this attempt. This produces good results in many cases. In some others, it is not effective. However, it is always worth a trial, for many an amputation can thus be avoided.

TABLE 6.

DIABETES IN HYPERTHYROIDISM

Author	Hyperthyroidism	Diabetes	Percentage
Joslin and Lahey			
Total hyperthyroidism	5,908	75	1.26
Primary hyperthyroidism	1,751	43	2.5
Secondary hyperthyroidism		28	4.3
Sattler	1,866	56	3.0
O'Day		4	
Fitz	1,800	9	0.5
John	9,000	207	2.3

Average incidence—2.31 per cent

Medication by mouth for diabetes is still but a dream. We all hope that some day it will be realized. However, at present, we have no substitute for insulin.

One thing to remember about diabetes in patients of advanced age, a point which I am once more emphasizing, is that it is likely to be mild in nature. Do not make life miserable by a rigid regimen and discouragement for an old person who is nearing the end of his life line. In such cases, a little restriction in the diet will go a long way toward controlling the diabetic state,

and if it does not, the treatment can be made more rigid. Through a very rigid routine one tends to discourage the patient, to weaken him and perhaps to precipitate an untimely end. It is better to do nothing than to do too much. Let them enjoy the few remaining years. All such patients need is prudent guidance.

So often a marked improvement can be seen in diabetic patients when they return from a vacation. A diabetic should have at least two vacations a year. It is well worth the investment.

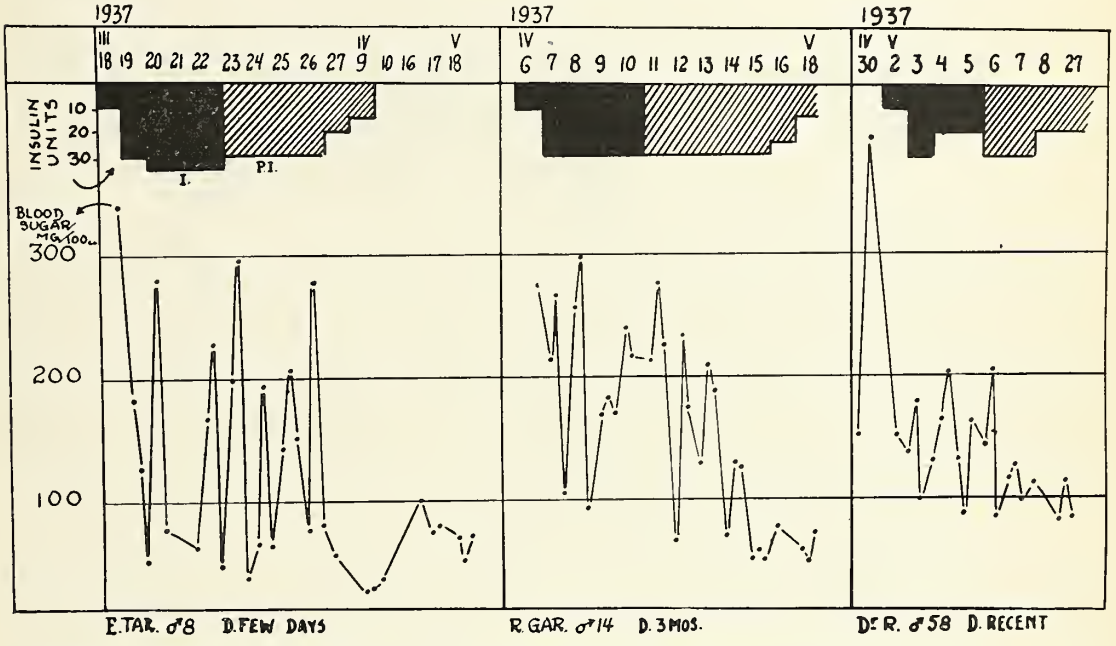


Figure 3. Changing over from Insulin to Protamine Insulin in three cases of diabetes.

While diabetic adults can go out and enjoy such a vacation, a diabetic child who needs it just as much and more has been left out because he can not go to the summer camp where his playmates go. The ordinary camps are not equipped to deal with the highly specialized problem of diets, insulin and complications among diabetic children.

In 1929 I organized a camp for diabetic children and I can tell you from personal observations that it has been a godsend to these unfortunate youngsters and also to their mothers. It is one place which is their own, where they can go, be properly cared for during their vacation and they mingle with 50 other children who are having the same conditions. A child who tends to be introspective and resentful because he has diabetes soon forgets his own troubles and enters into the spirit of the camp when he sees others enjoying themselves and getting much out of life, and carrying off honors in the high school and the university. Many a child has had his mental attitude completely transformed by this experience.

Now, a little over a year ago, the reports came from the Danish workers, Hagedorn and his group, about a modified insulin, which they called protamine insulin. All their work was an attempt to slow up the absorption of insulin when injected so that the gradual liberation of the insulin into the blood stream could prolong its action over a period of many hours. In this they succeeded in a clever manner by the combination of protamine with regular insulin. Regular insulin exerts its action for four to six hours. Their new preparation more than doubled this period. This certainly was a decisive step forward, for it meant fewer injections per day. This protamine insulin was improved upon in this country first by the addition of calcium, later by zinc, so that at present we have on the market protamine-zinc-insulin which is manufactured in this country by several firms and is all standardized equally. The amount of zinc added is very small. At present it is on the market in the U-40 and U-80 concentration.

The protamine-zinc-insulin is really a tremendous step forward. There are two main advantages from it: 1. The number of injections per day is reduced. 2. The blood sugar level throughout the 24 hours is more stabilized, almost at a level in most cases. The patients do better on it and they feel better, a point which is most marked in cases who had to take several large doses of insulin per day and who consequently had a great deal of fluctuation of the blood sugar level. This particular group of patients is receiving the most benefit from the new insulin.

In Chart 3 you can follow the progress of a

little boy eight years of age, who just recently became diabetic. He was put on insulin, as much as 35 units a day in divided doses and you can follow the fluctuations of the blood sugar from 300 down to 36. After five days, I changed over to protamine-zinc-insulin, 5 units less and the fluctuations continue for four more days; then there is a straightening out of the blood sugar level which continues on repeated examinations over a period of two months.

years of age, also a recent diabetic. The story is much the same as in the preceding two cases, one dose of protamine-zinc-insulin a day and a steady progress and a gradual diminution of insulin.

Such a picture as these three cases represent was not a novelty when we used the regular insulin. The big factor responsible for improvement is the recency of diabetes—where—by a judicious lifting of the load off of a lagging pan-

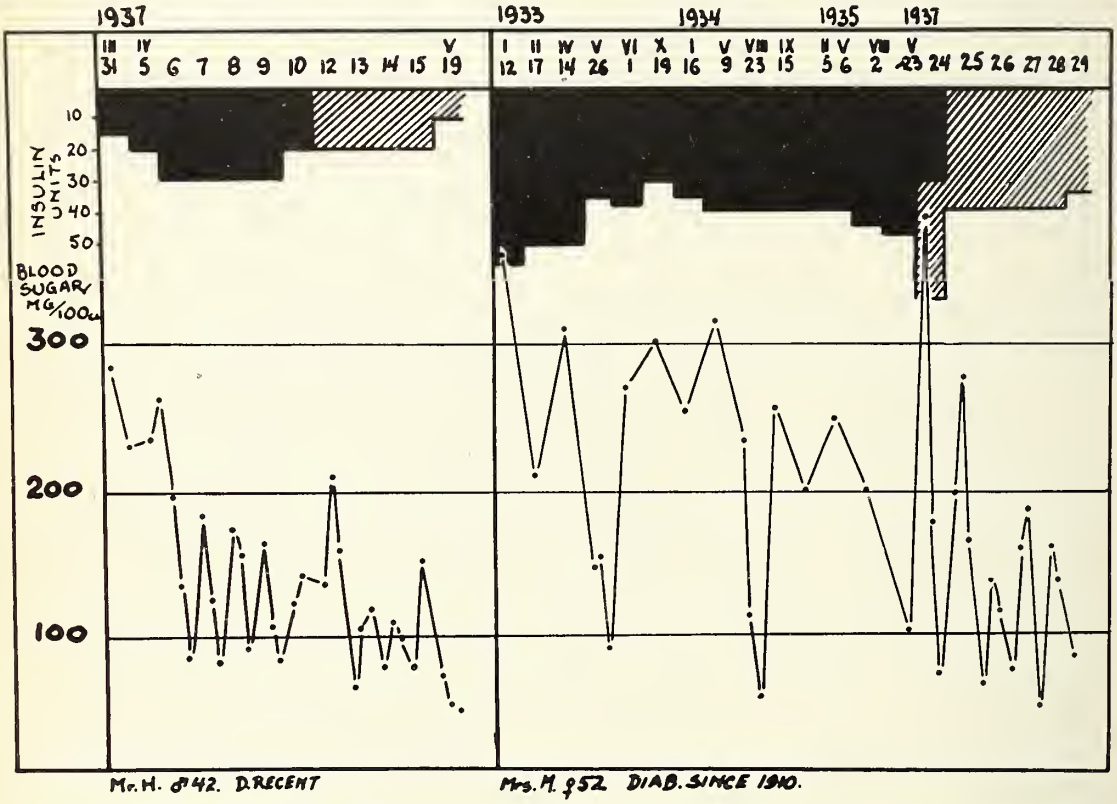


Figure 4. Changing over from Insulin to Protamine insulin in two cases of diabetes. Note the stabilization of blood sugar on Protamine insulin.

One might try to explain this on the recency of diabetes. When one starts treating a recent case of diabetes energetically, one often sees such a response.

The next case in this same chart is a boy 14 years of age. He had diabetes for a few months and was taking insulin when I first saw him, but was not getting adequate insulin for his needs. After five days on the old insulin I changed to an equal dosage of protamine-zinc-insulin. There was a steady drop of blood sugar level so that on the fourth day it was hovering around normal, morning, noon and evening. He was discharged from the hospital on the eleventh day on 25 units of protamine-zinc-insulin and when checked a month later I was able to reduce it to 15 units a day. A perfectly smooth progress and a continued control on a steadily decreasing dosage.

The last case on this chart is that of a man 58

creas we give it a chance to recuperate. It is the early and the adequate treatment of diabetes that counts! The time to treat diabetes rigidly is when it is first discovered and not to wait with the use of insulin until the patient lost his best chances. Protamine-zinc-insulin just makes the problem for the patient easier, that's all.

Chart 4 represents the progress of a man 42 years of age, also a recent diabetic. Outside of the 10 days in the hospital the man has been working steadily and here too we can note the stabilization of the blood sugar at a low normal level and staying stabilized on but 10 units of protamine-zinc-insulin.

While all the previous cases were recent cases of diabetes and for that reason mild, the next case I have picked purposely in contrast, one of the very severe diabetics and one of long standing. This patient is now 51 years of age and has

had diabetes for 27 years. Even in such a severe case and one of long standing you can note the stabilizing influence of the protomine-zinc-insulin.

In closing, I want to say that the problem of any diabetic patient is one of adjustment to his handicap and to his environment. Those who have not this capacity do not care for themselves well and hence are miserable and unhappy and ultimately may prove to be a serious burden to the family if not actually dependent. One of the problems of the physician treating diabetes is to individualize each patient's problem and relate the management of his condition to his environmental situation in so far as possible. This naturally makes for better cooperation on the part of the patient and hence better results from treatment.

10515 CARNEGIE AVENUE.

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The Problem of Rheumatism

The control of arthritis must be considered from two viewpoints, industrial and public health. The industrial side also has a social aspect. It implies the improvement of working cvonditions so as to minimize the factors predisposing to aggravation of arthritis in susceptible persons. By way of illustration, miners should wear light working clothes to permit aeration and minimize stagnant sweat. Before facing changes in temperature outside the mine, they should bathe at the mine head and change to warm, dry clothing. Workers in cold places should be provided with insulated clothes, especially boots and leather pads, warm canteens, hot food and hot foot-baths. For those exposed to wet, waterproof clothing, warm boots and warm dressing rooms are essential. The joints and muscles of workers using pressure drills should be protected by shock insulators, leather pads or other devices. There should be pauses from fatiguing work. In addition, provision for dry offices and houses, adequate sunshine, proper hours for food and rest and reduction of avoidable mental and physical strain are advocated. Social workers can do much to investigate, correct and control such phases of the problem.

The acceptance of the control of rheumatism as a public health function is the most important measure in solving the problem. In order to treat individuals intelligently, to rehabilitate them and restore their wage-earning capacities, certain standards must be formulated. Such standards must have the stamp of authority, the seal of trustworthy procedure. To develop such standards, centers must be established for the study, treatment and control of rheumatism. These rheumatism units must be designed and equipped to permit of careful observations, necessary research work and competent therapy. From such data, adequately analyzed and statistically compiled, concrete conclusions may be drawn to further reduce the economic and humanitarium inroads of rheumatism.

The industrial or insurance physician is handicapped in his efforts to return a patient rapidly to industry. The avoidance of progressive deformity and disability usually necessitate more special care than the physician can provide for the patient confined to his home. Furthermore, the honest worker prefers recovery of his wage earning powers to the acceptance of an inadequate pension. Therefore, when rheumatic centers are being established it is imperative that they be made available to the indigent worker whose dole covers but little more than his maintenance and does not provide for prolonged treatment. When therapy can be started early, great disability may be prevented. The administration of physical therapy in the evening may keep a worker performing his duties by day.

In Russia, where workers claiming disability from rheumatism are sent to the state spas, the disability from arthritis and the days' lost work have been reduced materially. The present-day advances in all forms of physical therapy have added powerful weapons to the physician's armamentarium in combating rheumatism. Vaccinotherapy and medical management are likewise indicated in certain cases. Surgery is playing an increasingly active and important role in restoration of function. The pessimism which regarded rheumatism as a hopeless ailment must be dispelled. The disease can be prevented and controlled, but conscious, concentrated action must be taken by those agencies which guide the destiny of modern medical welfare.—Jerome G. Finder, M.D., Chicago; Ill. Med. Jr., Vol. 73, No. 4; April, 1938.

In nine states, boys of 14 and girls of 12 years of age are considered able to give valid consent to marriage. The states are: Colorado, Florida, Idaho, Maryland, Mississippi, New Jersey, Rhode Island, Tennessee and Washington. The minimum age for issuance of a marriage license in Ohio is 16, and persons between 16 and 21 must have their parent's consent.

A STUDY OF THE RELATION BETWEEN BIRTH WEIGHT AND SIZE OF THE THYMUS SHADOW IN 2000 NEWBORN

By S. W. DONALDSON, M.D., Ann Arbor, Michigan

IT has long been the opinion of many physicians that only those new born which are above average in weight should be examined roentgenecologically for evidence of an enlarged thymus. Complicating the picture is the fact that there appear to be two separate and distinct schools of thought regarding the thymus problem. One group maintains vehemently that there is no such problem and that the danger from the existence of an enlarged thymus is negligible if it exists at all. The members of the other school of thought contend with equal firmness that an enlarged thymus is pathological, basing this contention on their experiences with sudden and unexplainable deaths in which the only finding was that of an enlarged thymus, or on their observation of the disappearance following irradiation of the classical symptoms attributed to the thymic syndrome.

The existence of an enlarged thymus in the newborn or the failure of the gland to undergo involution is not a recent medical discovery. Galen was the first to note that the thymus underwent involution and he also recorded the fact that it reached its maximum size at puberty. Other observers found that the thymus was enlarged in infants and children who died suddenly, and Griffith cites Pulowski as describing this finding in cases of sudden death in the children of one family[1]. A more recent study has led the author to arrive at a similar conclusion in regard to a familial tendency towards thymic hyperplasia by examinations of subsequent siblings after a finding of an enlarged thymus in the first new-born[2].

The anatomy, histology, cytology, clinical symptoms, and meager physiology of the thymus gland have been fully described in numerous papers and it is not considered essential in reporting this study of incidence as related to birth weight to include such descriptions.

In older individuals and children the anatomists and pathologists have determined the weights of the thymus gland at different age periods and in various stages of health and disease. Bovaird and Nicoll imply that the thymus varies in size with different stages of nutrition[3]. Warthin[4], Potter[5], Margolis[6] and Klose[1] have demonstrated the presence of thymic hyperplasia in diseases of the thyroid. Donaldson and Towsley[7] made a study of the incidence of thymic enlargement in the newborn after prenatal use of iodized salt by the mother and Rowntree[8] and Marine[9] have studied the thymus as associated with other hormone producing organs.

Submitted February 24, 1938.

The Author

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Since the advent of the roentgen ray examination of the chest in patients of all ages, the finding of a superior mediastinal shadow wider than normal in the newborn has become the subject of considerable study. One observer, Scammon[10], has pointed out that the size of the thymus is proportionate to the body weight, the implication being that one should expect to discover a thymus of greater weight in babies overweight at birth.

Paltauf[11] in 1889 expressed the opinion that thymic hyperplasia was a manifestation of a constitutional disorder, status lymphaticus. This opinion was later substantiated by Warthin[12]. Boyd[13], however, has recently questioned the abnormality of this condition and Young and Turnbull[14] in an analysis of the data collected by the status lymphaticus investigation committee concluded that status lymphaticus has no existence as a pathological entity.

In the condition described as status lymphaticus there is a marked increase in all lymphoid structure including the tonsils and adenoids. If present, the condition may exist for some time before being detected or producing symptoms, but it undoubtedly often determines a fatal outcome from some trivial illness, minor operation, or the administration of an anesthetic.

Due to the fact that hypertrophy of the tonsils and adenoids was a constant finding in individuals of the status lymphaticus type, they for that reason, became early subjects for anesthesia and for removal of the tonsils. Obviously because of their constitutional disorder they were poor risks from a surgical standpoint. The fact that these children are usually overweight, combined with the suspicions of the surgeon, makes it seem apparent that conclusions of the early observers have carried on to the present time and, as previously stated, the opinion still prevails that only large babies should be suspected of having an enlarged thymus.

Many writers are apparently skeptical of the

existence of any danger from an enlarged thymus, and Reuben and Fox[16] feel that sufficient evidence has not been adduced to prove (1) that the thymus is the cause of the so-called thymic syndrome in every case; (2) that the syndrome is due to hyperplasia or enlargement of the gland; and (3) that x-ray represents the true size of the thymus.

Numerous observers have recorded the fact that the width of the upper mediastinal shadow is altered by exertion, breathing, crying, and heart beat. Martin[17] expresses the opinion that the thymus is variable in the same infant at different times. Engelbach[18] says that the marked vascularity of the thymus submits it to marked dilatation and that it is probably easily affected by emotions which produce a vasomotor dilatation. Mulherin, Harrell and Holmes[19] concluded that the position of the diaphragm makes no difference, but Gerstenberger[20] believes that the position of the diaphragm affects the width of the thymus shadow. Hasley and DeTomasi[21], by means of a Jarre Cinex camera, were able to obtain serial films to substantiate their claim that the mediastinal shadow changes size during heart cycle and breathing.

Kinney and Taylor[22], in their report of a study of newborn babies, regard a mediastinal shadow of 3 cm. or less as normal. Wasson[23] uses twice the width of the third dorsal vertebra as normal, and Carr[24] in a study of two groups of cases sets the normal at 2.7 cm. in one group and 3.1 cm. as normal in the other, with the measurements made in both series at the level of the third dorsal vertebra. Coe[25] has devised a curve showing the relative size of the supra cardiac shadow as normal up to three months. Shannon[26] in his series establishes a thymus chest ratio and finds the normal to be approximately in the proportion of 1:2.2.

Numerous positions have been recommended for making the roentgen examination of the chest of the newborn for enlarged thymus. Remer and Belden[27] specify that the examination be made with the child in the erect position. Others use an anterior-posterior and a posterior-anterior view. Pancoast[28], Chamberlain[29] and Bromer[30] use a lateral view routinely in order to detect displacement, compression, or buckling of the shadow of the trachea. Pendergrass[31] and Barnett[32] urge that a combined fluoroscopic and radiographic examination is essential for a positive diagnosis of enlargement of the thymus.

In the study reported in this paper all newborn were examined in the same department of roentgenology by the same staff of technicians and according to the same routine. All newborn were examined 24 hours after birth except when a special request was made for an earlier examination. All cases were filmed in the supine position, and in addition to the anterior-posterior, a lateral view with the chin elevated was made. Rapid technic was adhered to in all examinations and all exposures were made at a 30 inch distance.

In addition to the establishment of a routine method of examination, a standard for interpretation was also set up and followed, measuring at the level of the third dorsal vertebra, a width of 3 cm. was considered as the upper limit of normal, 3.5 cm. as borderline, and more than 3.5 cm., together with displacement or compres-

MALE NEWBORN

Weight	Negative	Positive	Borderline	Total	Total Positive and Borderline	Per Cent
3½-4	1			1		
4-4½	2			2		
4½-5	10		4	14	4	28.5%
5-5½	9		2	11	2	18.1%
5½-6	29	3	4	36	7	16.5%
6-6½	51		4	55	4	7.8%
6½-7	88	11	5	104	16	15.4%
7-7½	156	16	12	184	28	15.2%
7½-8	148	17	14	179	31	17.2%
8-8½	141	22	13	176	35	19.8%
8½-9	91	19	15	125	34	27.5%
9-9½	52	9	7	68	16	23.5%
9½-10	20	12	0	32	12	37.1%
10-10½	6	1	1	8	2	25.0%
10½-11	2	1	1	4	2	50.0%
13-13½	1			1		
	807	111	82	1000	193	19.3%

FEMALE NEWBORN

Weight	Negative	Positive	Borderline	Total	Total Positive and Borderline	Per Cent
2½-3	1	0	0	1	0	
3½-4	2	0	0	2	0	
4-4½	5	0	0	5	0	
4½-5	9	0	0	9	0	
5-5½	14	1	1	16	2	12.5%
5½-6	39	3	1	43	4	9.3%
6-6½	80	3	5	88	8	9.2%
6½-7	141	10	10	161	20	12.5%
7-7½	171	28	10	209	38	18.2%
7½-8	142	23	10	175	33	18.8%
8-8½	106	19	14	139	33	23.7%
8½-9	54	11	10	75	21	28.0%
9-9½	28	7	0	35	7	20.0%
9½-10	22	6	0	28	6	20.9%
10-10½	8	0	0	8	0	00.0%
10½-11	2	1	2	5	3	60.0%
11-11½	1	0	0	1	0	00.0½
	825	112	63	1000	175	17.5%

sion of the trachea, as a positive indication of enlarged thymus.

This routine procedure was instituted due to the fact that various methods have been advocated for examination and also different interpretations have been offered as to what is a normal shadow. By accepting a set standard for normal and a prescribed method of examination for one particular staff it was felt that if any error was committed it would at least be consistent and would have no direct bearing upon the final results.

This series of 2,000 babies consists of 1,000 consecutive males and 1,000 consecutive females born in a hospital, the weight recorded being considered accurate. The mean percentage of the incidence of some enlargement of the thymus is 18.4 per cent with 19.3 per cent of positive findings in the males and 17.5 per cent in the females.

The tabulations in this series do not bear out entirely the contention of Wasson[33] who states that all overweight babies should have the benefit of a roentgen examination in order to determine whether or not there is enlargement of the thymus gland. In this series the percentage of enlargement in the heavier babies appears to be limited to the males and, as has been pointed out, the size of the thymus shadow is proportionate to the body weight. In the male group 643 babies fall within the weight range of 6½—8½ pounds with a thymic abnormality in 16.9 per cent. Below this weight range and excepting three premature babies there are 116 babies with a thymic incidence of 17.7 per cent and above 8½ pounds there are 238 babies of whom 27.1 per cent show a thymic enlargement. In the female group there are 685 babies within the normal weight limits with a percentage of thymic enlargement of 18.3 per cent. Below this level and excepting eight premature, the percentage is 7.5 per cent, and in the heavier babies numbering 152 with only 11 above 10 pounds the percentage is 24.3 per cent, while in the male group there are 238 babies above 8½ pounds birthweight and showing a thymus enlargement in 27.1 per cent.

Combining the two groups, male and female, there are 282 babies below 6½ pounds and of this number 31 or 10.99 per cent show an increase in width of the thymus shadow. Between 6½ and 8½ pounds in weight are 1328 of whom 234 or 17.6 per cent have a wide mediastinal shadow and from 8½ pounds upward there are 390 with 103 or 26.4 per cent abnormal.

Lange[34] in 1911 was one of the first to describe the effects of roentgen irradiation upon the thymus gland but text books published as late as 1915 make no mention of it in their discussion of the treatment or prognosis of an enlarged thymus. Following the report of his findings, newborn with a thymic shadow were subjected to x-ray treatment, and routine preoperative irradiation of the gland with its subsequent reduction in size was a precaution taken by many surgeons.

All babies in this series with a borderline finding were given one treatment of 100 r, 130 P.K.V. filtered through 4 mm. of aluminum. This amount of radiation was considered to be sufficient to cause involution of the gland in a newborn infant and was given solely as a prophylactic measure. Those with a more marked finding of enlargement and with compression of the trachea were given from two to four treatments of 100 r each with the same factors. Treatments were administered at weekly intervals and check-up films were made 30 days following the last treatment to determine whether or not there had been a reduction in size of the shadow and expansion of the shadow of the trachea.

In practically every case where a re-examination was made following treatment there was found to be a reduction in the size of the shadow of the thymus and an increase in the width of the shadow of the trachea to normal. In a very small percentage of the cases the thymus shadow had not receded to within normal limits, but had diminished in size and appeared denser, suggesting that fibrotic changes had occurred as a result of the radiation and induced involution. Up to the present time, although records are not complete on every child examined, in none of the children in either the treated or the untreated group who have died has the death been attributed to a persistent thymus.

Some of the comments of other writers in regard to roentgen ray treatment on the finding of an abnormal thymus shadow in cases without symptoms should be mentioned. Gilmore[35] takes the stand that thymic enlargement from an x-ray standpoint is indication for therapy regardless of the physical findings, while Johnson and Howard[36] feel it necessary to rule out every possible cause of noisy or difficult breathing before narrowing down to a diagnosis of thymus enlargement. Thursfield[37] says that the radiologic evidence of an enlarged thymus is to be taken with caution. Barnes[38] in a review of 63 cases finds no evidence of ill effects from the administration of x-ray in comparatively medium sized doses over the upper mediastinum. Hess[39] reports two isolated cases in which he attributes mental defectiveness to x-ray administered shortly after birth. Polk and Rose[40] report a collection of cases in which they think there is no evidence of retardation in any form which could be attributed to excessive therapy to the thymus. The recent experimental work of Gershon-Cohen[41] in which sufficient dosage was given to the thymus of rats to entirely destroy the gland shows histologically an effect upon the gonads and the sterilizing effect is more pronounced in the male than in the female. O'Brien[42]

states that those who have a shadow but no symptoms should be treated only prior to an operation or anesthetic and Kirkland[43] advises to treat only to relieve symptoms and if the symptoms reappear to repeat the treatment. West[44] concludes that preoperative x-ray is not indicated in the absence of symptoms and that there is no indication for treatment in the absence of symptoms.

CONCLUSIONS

1. Of 2,000 newborn infants, 18.4 per cent showed roentgenologically some degree of enlargement of the thymus, and 11.15 per cent were classified as definitely positive.

2. The percentage of enlargement in the heavier babies is higher in the male.

3. The heaviest baby in both groups was negative for thymic enlargement.

4. The uniformity of the percentage of enlargement in the normal weight babies with a gradual increase as birth weight increases would imply that the size of the thymic shadow was proportionate to birth weight rather than pathologically enlarged.

6. No ill effects were noted from small doses of radiation administered as a prophylactic measure.

7. Not enough evidence was presented in this series to indicate that only those babies weighing more than 8½ pounds should be examined for an abnormal thymus shadow.

8. Therapy was administered upon roentgen ray evidence of enlargement.

9. Decrease in the size of the thymus shadow was noted in all cases treated and re-examined. No thymic death has occurred in any child in this study as far as our present records are concerned.

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APPENDICITIS

By FREDERICK W. JAMES, M.D., Lancaster, Ohio

APPENDICITIS is one of the "itises" of a very small part of the human body, of what anatomists call a vestigial part, and yet which accounts for 15 deaths per 100,000 population per year, a rate which can be decreased by properly understanding the disease, and by instituting timely treatment to from 15 per cent mortality in perforated cases to about .1 per cent in simple acute cases. Accordingly it is very important that we ourselves can recognize the early signs and symptoms of this condition, and that we educate the public to the importance of prompt action, in cases of pain in the abdomen to see a competent physician, and to abstain from giving a purgative, for it is upon these three things together that we must depend to lessen the incidence of late gangrenous perforation.

ANATOMY[1]

The appendix is an outpouch of the caecum, of varying length, joining the caecum in the vicinity of the junction of the ileum and caecum, and whose cavity is protected from regurgition of the caecal contents by a fold of mucous membrane, the valve of Gerloch. The appendix has much the same histological character as the caecum, there being a serous coat, and two muscular coats, the outer longitudinal being continuous with the fibres of the tenia of the caecum, a submucous and mucous lining. The submucous and mucous coats contain an excessive amount of lymphoid tissue, so much so that at times it is called the abdominal tonsil. The mucosa is ciliated with the cilia moving toward the opening of the appendix into the bowel. The lumen of the appendix normally contains mucus, bacteria, liquid substance similar to the caecum, and at times hardened masses of stool called enteroliths. There is a mesappendix of varying length, which determines the position the appendix occupies in the abdomen. It may be long, allowing the appendix to hang freely over the pelvic brim, or it may be short as to pull the organ up behind the caecum in which case it is almost absent. Adhesions may kink the appendix so it will point up toward the spleen or laterally along the belly wall toward the liver. The position of the appendix determines the nature of the symptoms due to inflammation of the appendix, and also to the course of treatment followed in such a condition. The blood supply is derived from the right ileocolic artery of the superior mesenteric vessel, and courses the free edge of the mesappendix, or where the mesentery is absent courses in the subserous tissue of its tip. This vessel is an end vessel, which accounts for the frequency of thrombosis. The nerve supply comes from the superior mesenteric plexus which explains the widespread nature of the pain in appendicitis.

Read before staff meeting of Lancaster City Hospital, March 16, 1937.

The Author

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ETIOLOGY

Many factors must be taken into consideration in explaining the cause of appendicitis. The most important being (1) obstruction to the emptying of the appendix, by fecal stasis in the caecum, by contraction of adhesions kinking the appendix, by contraction of fibrous tissue within the walls of the appendix and so closing the lumen. Whatever the obstruction may be, a stasis in the contents causes putrefaction with the liberation of toxins which irritate the mucosa and the bacillus coli within the lumen, gains entrance to the submucous tissue, and an inflammation is begun, which progresses to abscess formation and eventually ruptures through the serous coat into the free peritoneal cavity. Frequently enteroliths, seeds, oxyuris vermicularis, etc. are found within such abscesses. (2) Infection of hematogenous origin, from focal infection within the tonsil, teeth, gallbladder. Because of the predominence of lymphoid tissue in the appendix, especially in children, this is the main cause of the condition in the young, and the lack of resistance on the part of the young explains the extreme virulence at this age. As the patient grows older the lymphoid tissue gradually disappears in the appendix in a similar manner to the atrophy that occurs in the tonsils, etc., so that this is less often the cause in older patients. (3) Extension from a colitis[2] by continuity. (4) Thrombotic processes in the end artery circulation caused by changes in the vessel walls, by pressure from without, by kinking of the mesentery, by injury and the general changes in the circulation of old people, accounts for the cause of most of the cases of appendicitis in the aged. Gangrene follows the stopping of the circulation, and upon such a scene, the bacteria within the appendix forms the extensive abscess. The resultant phlebitis can spread up the colic and mesenteric vessels explaining the occurrence of pyelophlebitis at this age. (5) There are authorities who consider appendicitis of a neurovegetative origin affecting the plexus of sympathetic nerves, which retards the circulation supplied by these nerves

and causes the thrombosis. This will explain the widespread pain, and unusual symptoms seen in appendicitis in the later half of life, particularly the vague and extensive digestive symptoms. (6) New growths such as carcinoma, lymphosarcoma, mycoma may rarely cause attacks.

BACTERIA[3]

. . . The organisms found in appendicitis are: Bacillus coli most common, streptococci hemolyticus, bacillus pyocyaneus aurus, cloistridium Welchii. The prognosis of a ruptured appendix depends upon the nature of the causative organism. The bacillus coli being the least serious, and cloistridium Welchii the most serious. Because of the later organism many hospital routines are to give prophylactic injection of Welchii antitoxin in every case of gangrenous appendicitis. Tuberculous bacillus actinomycosis, spirocheta pallida less commonly occur.

PATHOLOGY

The pathological process can vary in intensity depending on its cause, from a mere congestion with dilatation of the vessels and resulting scar formation in the walls of the organ, to abscess formation within its lumen, and the erosion of this through the muscular walls to rupture into the peritoneal cavity, where it may or may not be walled off by adhesions with the omentum. If the appendix is retrocaecal the abscess may be extra-peritoneal, with no peritoneal symptoms upon rupture. If the appendix is over the pelvic brim the rupture is usually into the general cavity, with very serious widespread peritonitis of high mortality. At other times the artery becomes thrombosed, and a mass gangrene develops involving the whole appendix and part of the caecum, all of which becomes dark red, swollen, and very friable so that removal is tedious if at all possible.

PROGNOSIS

Vital statistics of the United States give a mortality of 9 per 100,000 in 1920 to 15 per 100,000 in 1930. Metropolitan Life statistics give 10.6 per 100,000 in 1910 to 14.1 per 100,000 in 1930, but many clinics give a decreasing rate of mortality, thought to be due to the higher incidence of the condition, and the better diagnosis on the part of the physicians. J. H. Garlock[5] gives statistics to prove the mortality of acute appendicitis is directly dependent upon the length of time between the onset of symptoms and the operation.

The statistics from the records of our own hospital are rather surprising particularly in their low mortality. In the last five year period 1932 to 1936 we have admitted 484 cases of appendicitis with a total of 13 deaths, giving a mortality for all appendicitis cases 2.7 per cent; 387 of these cases were acute, in which class all deaths occurred giving a mortality for all acute cases of 3.3 per cent and for chronic cases of .0 per cent; 275 of this group were simple non-ruptured cases with two deaths, a mortality of .75 per cent and 112 cases were ruptured with 11 deaths giving a mortality rate for this class of 9.8 per cent. From these figures you can see we are having a considerably lower rate of mortality than the average.

SYMPTOMATOLOGY

Only about 50 per cent of cases have the classical picture of pain, temperature rise, nausea, vomiting, rigidity, tenderness on pressure and leucocytosis. Pain on pressure can be demonstrated in almost 100 per cent, though in pelvic appendicitis and the retrocaecal types pressure must be very deep. The pain varies considerably from a generalized soreness all over the abdomen due to irritation of the splanchnic plexes to the localized colicky pain directly over McBurney's point, developing in that order. Rigidity, if present, is always of vital importance in diagnosis. The patient with abdominal pain, lying quiet, having drawn up his right or both of his knees so as to relax his abdominal and psoas muscles, should be one's first impression. More careful observation will show him to have an absence of abdominal breathing, and upon palpation, to find his right rectus with either board-like rigidity or become so when touched. The right quadrant will also be hypersensitive to epicritic touch. Often times pressure over the epigastric region will cause pain over McBurney's point.

Because of the neurovegetative changes found in the aged, digestive symptoms may develop from flatulence to total hypochlorhydria. In the last two years I have found over 50 per cent of the cases upon which I have done appendectomies to have had periods during which their free hydrochloric acid drops down to .03 per cent or less. Since we know the secretion of free hydrochloric acid is due to the stimulation from the splanchnic plexes upon the oxyntic cells of the stomach, this absence may result from the neurovegetative disturbance found. Nausea and vomiting are present in 70 to 80 per cent of cases. Obstipation usually occurs. Leucocytosis is not a reliable index, as many cases do not raise above normal until after rupture.

The differential count is of great importance in making a diagnosis of appendicitis, the increase being mainly in the neutrophilic polymorphonuclears which may increase to 80 per cent or 90 per cent. The average increase in acute cases is around 10,000 to 12,000, increasing to around 18,000 with abscess formation and from 22,000 to 25,000 upon perforation with peritonitis. Old people develop a leucocytosis very late, and children run a high count usually early. If a case develops a count of over 25,000 with no temperature, or a temperature of around 104 Fahren-

heit one should look for some other cause than appendicitis, such as acute salpingitis or pyelitis. The temperature in acute appendicitis at first is not high, being around 99 to 101, but gradually rising as the case progresses. The pulse ranges from 80 in early cases, to 120 about the time of perforation. Cases of extreme toxicity, such as those due to streptococci and clostridium Welchii, run a very rapid pulse of 150 to 160, and assumes the picture of shock early.

A physician should not depend on laboratory findings alone to make his decision whether or not to operate. If he is uncertain, co-operate with the surgeon, and upon the clinical picture often times much time can be saved, without waiting for laboratory findings. Rectal examination elicits tenderness in the right side, or if an abscess is formed a mass can be felt. Vaginal examination will likewise reveal a mass high up in the right quadrant. Frequently urinalysis will show pus cells, red blood cells and traces of albumen in appendicitis which are probably of toxic origin, rather than due to the proximity of the kidney to the appendix.

DIAGNOSIS

The recognition of acute appendicitis must be made from many conditions with similar symptoms which I will divide into two classes because of the treatment required in each.

(A) Those in which operation is contra-indicated: (1) pneumonia, (2) typhoid fever, (3) gastro-intestinal disorders, (4) acute infections, (5) plumbism, (6) tabes dorsalis, (7) stone in the kidney or ureter, (8) pyogenic infection of the kidney, (9) acute salpingitis, (10) Pott's disease of the spine, (11) neuralgia of the lower thoracic nerves. In pneumonia of the base of the lung your attention is attracted to the presence of dyspnoea, and the absence or decrease of thoracic breathing and the presence of abdominal breathing, also the greater leucocytosis and toxemia of the patient. In typhoid fever, the insidious onset, the slow pulse, leucopaemia and the absence of localized deep tenderness; acute gastrointestinal disorders can be differentiated by the relief obtained from the evacuation of the bowels and rapid improvement after eliminating the cause. Acute infections can be differentiated by the absence of deep local signs, plumbism by the lead line on the gums and stippling of the blood. Tabes dorsalis by the absence of temperature, by absent knee jerks, and characteristic pupillary changes. Renal colic has its paroxysms of severe pain of colicky nature, frequency and hematuria-pyogenic kidney lesions are usually associated with chills, sweats, high oscillations of temperature and insidious onset. Salpingitis in the acute form gives us higher temperature, higher leucocytosis, tenderness and mass on either side of the uterus and a patient not as toxic as the systemic symptoms would call for in appendicitis. Pott's disease can be differentiated by anemia, tender spine of the vertebra involved, and the history.

(B.) Those conditions in which operation is necessary but the approach is different: (1) Ruptured duodenal ulcer, (2) acute cholecystitis, (3) intestinal obstruction, (4) peritonitis (pneumococeal or tuberculosis), (5) tortion of an ovarian cyst, (6) ectopic pregnancy. Ruptured ulcer usually starts with more shock and a general board like rigidity, more rapidly progressive than in appendicitis, with no temporature at first and little change in pulse, later the symptoms become very similar to the peritonitis of perforation of appendicitis. Acute cholecystitis has rigidity in the upper quadrant, the type of patient and the history of the onset differing from appendicitis. Intestinal obstruction starting with severe pain and no temperature, complete constipation with no relief or stool after repeated enemas, vomiting is incessant with complete intolerance of food. Peritonitis of pneumococeal or tuberculous origin usually has slower onset with no localizing signs and the associated history. Torsion of an ovarian cyst or fibroid usually is associated with shock and mass formation of sudden onset, Ectopic rupture with shock and signs of hemorrhage in a patient with a history of having had an abnormal mense or missed a period, and with a mass extremely tender in the region of the tube.

In consideration of the later group where doubt exists, one should go ahead and do a laparotomy using a rectus or midline incision that could be extended to reach whatever region is found to be necessary upon exploration, rather than wait for time to make further tests to clear the diagnosis.

TREATMENT

Appendicitis in the acute form before perforation, should be immediately treated by operation with removal. The alternative expectant treatment that used to be suggested by some authorities has no place in our present mode of attack as there is no symptom or sign that can safely be followed believing the attack will subside. Different modes of approach are used but the right rectus or gridiron incision are the two popular ones. Exposing the vicera, the carecum is delivered and following the anterior tenial band the junction of the appendix with the caecum is located. After ligaturing the mesappendix the base of the appendix is crushed and ligated after which the appendix is severed and the stump cauterized by phenal and alcohol. It is not considered necessary to invert the stump according to present authorities.

After perforation there is a wide difference of opinion as to the proper course to follow. Inasmuch as the position of the appendix (7) and adhesions formed determine whether the perforation will be associated with abscess formation or

generalized peritonitis, and as this cannot be positively proved without opening, many surgeons open all bellies except those who are moribund, and then decide the action taken. If the area is walled off well and the appendix gangrenous, it is wisest to merely insert a drain and get out, unless the organ can be removed without disseminating the infection any. At a later date the appendix can be removed quite safely. Some argue here against having a perforated appendix in situ, claiming there is a continued output of bacteria from the focus, and also constant drainage from the perforation which finally breaks down the patient's vitality.

If the perforation is retrocaecal some authorities believe no operation at all should be done, but supportive treatment instituted (8) until the acute stage has subsided, and then the operation performed. In the aged where perforation has taken place, as is so common because of the atypical nature of appendicitis, and the late stage a diagnosis is made, the patient is frequently moribund and here it is unwise to do anything but supportive treatment of 5 per cent glucose and saline, morphine, Fowler's position, whiskey and stimulants until the shock has subsided, and then operate and remove the organ. The mortality naturally is high here. All authorities advise free use of morphine in the supportive treatment of perforated appendicitis, to inhibit peristalsis and allow the infective process to be walled off.

Many new ideas for treating peritonitis of appendicitis are expounded by different authorities, from washing the peritoneal cavity out with saline, and closure without drainage, to free drainage (4) and keeping the patient in the ventral position to augment drainage. The merits of these methods are all questionable, but (6) as far as I am concerned if I ever have a perforated appendix I pray someone will open me and removing the appendix if at all possible, will insert free drainage and using plenty of glucose and saline with morphine to keep me quiet, allow me to take my chances without further experimentation. Much experimental work has been done on the administration of vaccine, serums and antigens to assist nature in her fight against a progressive peritonitis but without any appreciable lowering of the mortality.

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Non-Specific Management of Tetanus

Fluids.—The patient should be allowed all the fluids he can take by mouth, if distress is not too great. If unable to swallow, 5 per cent dextrose, saline, or a combination of the two, may be given intravenously during the first few days. Caution must be exercised not to overload the patient with intravenous fluids. Massive doses are dangerous and may induce pulmonary edema, hypostatic pneumonia and cardiac failure. After the first few days, with assistance, most patients manage to take small amounts of water by mouth.

Oral Hygiene.—Oral sepsis must be prevented, as far as possible, by gentle suction, aspiration, or cleansing. Careful attention to this detail will help avoid a fatal secondary aspiration pneumonia.

Diet.—The diet consists of liquid foods at frequent intervals, gradually changing to a semi-soft and soft diet by the end of the second week.

Posture.—Frequent change of position is essential to avoid pulmonary complications. Resting on the side or abdomen is preferable and desirable by most patients. A certain degree of restlessness or mild convulsions are of no great concern, and are no indication for additional sedation.

Sinuses.—Despite precautions, patients frequently develop purulent sinusitis. Excessive sedation and poor oral hygiene, associated with mouth breathing and rapid shallow respirations, contribute to a secondary bronchopneumonia.

To avoid such complications, postural drainage by moderate elevation of foot of the bed, and shrinkage of the mucous membrane of the nose, will aid materially.

Pneumonia.—This condition may complicate the clinical picture between the fifth and seventh days, and requires symptomatic treatment.

Quiet.—The patient should be in a semi-dark room where excessive light can be avoided. Special attention should be given to squeaky beds, doors, noisy elevators, unnecessary bedside conversation, and repairs being made in the hospital, in the vicinity of the patient's room.

Nursing Management.—Next to antitoxin therapy, general nursing care plays the most important role. The nurse should be entirely aware of the difficulties encountered and their management.

Frequent attention to oral prophylaxis, posture, changes of position and other factors enumerated, all contribute to recovery. The nurse should befrain from fussing too much with the patient.—Hyman I. Vener, M.D., Los Angeles, Cal.; Cal. and Western Med., Vol. 48, No. 3; March, 1938.

ENDOCRINE DIAGNOSIS AND TREATMENT IN WOMEN

By WYNNE M. SIBERNAGEL, B.S., M.D., and ROSWELL S. FIDLER, B.A., M.D., COLUMBUS, OHIO

THE diagnosis of endocrine dysfunctions in women presents a new problem, at once confused by a plethorea of terms and a multitude of suggested remedies. Confusion can only be avodied by rational methods of diagnostic procedure and simple laboratory aids based upon our present knowledge of female sex physiology. Such diagnostic methods form the foundation of successful treatment.

The diagnostic methods to be described have been found to result in accurate diagnosis in 90 per cent of all dysfunctional cases, leaving only 10 per cent in which additional laboratory procedures are necessary.

The work here reported has extended over the past three years and was done entirely on private patients. It is a complete endocrine study of 177 individuals upon whom was secured 374 endometrial biopsies, 324 glucose tolerance tests and basal metabolisms after securing the histories, physical examinations and routine laboratory examinations. In indicated cases urinary estrin and prolan determinations were made. This series of cases was taken in consecutive order and at random as regards the type of endocrine disturbance. The control series was selected in the same manner and prior to the present series. These control cases were treated empirically and symptomatically without appreciable benefit in approximately 80 per cent. The present series has shown an actual reversal of this percentage as based upon a final analysis of 125 cases out of the series of 177. The remaining 52 cases are those who have either refused treatment or are under treatment at this time and are therefore not included in this report.

CLINICAL DIAGNOSIS

Chief complaints such as sterility, amenorrhoea, dysmenorrhoea or hypermenorrhoea are symptoms only of some basic endocrine disturbance and are not clinical entities. There is no treatment for any of these symptoms but there is treatment available for the cause of these conditions. These complaints require the same care in diagnosis as does abdominal pain in surgical conditions if we are to institute intelligent treatment.

The history is of first consideration. This includes a complete medical history followed by a special history. In this, especial attention must be paid to the history of the onset of menstruation. In this country, amenorrhoea persisting beyond the age of 16 years is indicative of ovarian hypofunction and is the only diagnosis which may be made on the basis of history alone.[1, 2] The description of the menstrual flow, the number of pads used daily, the passage of blood clots and the pressure of pre or intermenstrual pain is quite important.

The general physical examination attracts particular attention to the presence or absence of hair and its distribution, the character of the nails, the texture of the skin and the distribution of fat. Hirsutism[3] is commonly associated with menstrual disorders and may be due to arrhenoblastomatous tumors of the ovaries or adrenal glands. It also appears in some cases of hyperpituitarism.

The special physical examination should be made regardless of the chief complaint. It consists first of an inspection of the perineum. A deep introitus with a deeply placed urethra and a short, thin obstetrical perineum is suggestive of infantilism, either pituitary or ovarian in type. A vaginal examination by speculum follows. A long conical cervix with a small external os is suggestive of infantilism, especially if there is an area of congenital erosion.[4] Cervical and uterine measurements are made with a graduated sound. In a nulliparous patient,[5, 6] the measurement from the external os to the fundus should be 7 centimeters and the cervix should measure 2½ centimeters in length. This represents a ratio of uterus to cervix of approximately 3 to 1. In a parous individual the uterine measurements may be slightly longer. A change in this ratio is suggestive of infantilism and if the ratio is reversed a pituitary cause is to be suspected. Tubal insufflation procedures are included if the chief complaint is sterility; if not this procedure may be omitted.

The Schiller test[7, 8, 9], is performed routinely and suspicious areas are removed for micro-

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scopical inspection. As a result of this procedure, seven cases of early carcinoma in the presumably curable stages have been discovered in this series.

In the absence of pelvic inflammation or palpable adnexal masses, and having ruled out by the above procedures all organic causes for the complaint, an endometrial biopsy is obtained. This is a simple procedure and may be done in the office with only slight discomfort to the patient.

The method of obtaining the biopsy is simple. The cervix should be cleansed with merthiolate or other suitable antiseptic. It is then dilated only slightly and either a Jackson laryngeal punch or a curved Novak[10] suction curet is inserted until the tip touches the fundus. The Novak curet used without suction is more satisfactory and is used by gradually withdrawing from the fundus, keeping the serrated edge pressed against the uterine wall. This furnishes ample material for histological examination when transferred immediately to a 4 per cent solution of formaldehyde.

ENDOMETRIAL BIOPSY STUDIES

The cyclic development of the endometrium follows a regular and progressive pattern in the normal woman and reflects accurately and promptly the state of ovarian activity.[11] Any observed stage of endometrial development may therefore be taken as the criteria of ovarian function or dysfunction,[12] dependent upon the approximation to or deviation from the expected pattern normally corresponding to the developmental time interval in the cycle. Endometrial biopsies do not yield information regarding the state of pituitary activity. A dysfunctional endometrial pattern simply indicates a dysfunction of the ovary and does not classify that ovary as primarily or secondarily deranged.

The endometrial cycle begins with the onset of the menstrual flow. At this time Prolan A from the pituitary and oestrin from the developing ovarian follicle are the predominant hormones. With cessation of menstruation the endometrium is found in an essential resting stage in which the stroma is compact and the glands small and tubular and lined with a compact cuboidal epithelium. Continued stimulation by oestrin in the developing follicle of the ovary soon produce a hyperplasia of the glandular epithelium and its arrangement into a pseudo-stratified form. The stroma remains compact. About the twelfth to fourteenth day in the cycle the ovarian follicle presents a transformation of the lining granulosa cells into luteal cells and there appears a small amount of hemorrhage into the clear follicular fluid. This observation has been repeatedly verified on unruptured follicles and is a new and original observation. The classical statements appearing in text books limit the formation of luteal tissue to the post-rupture stage and in so doing fail to explain the corresponding luteal changes in the endometrium.

With the development of luteal tissue in the follicle before rupture there appears a clear area of glycogen at the base of the epithelial cells forming the endometrial glands. This glycogen passes slowly around the side of the nucleus and appears before ovulation at the luminal end of the epithelial cell. Sevringhaus[13] states that this glycogen is a presecretory product of the glandular epithelium.

Extrusion of the ripe ovarian follicle (ovulation) is indicated by a slight superficial edema in the endometrium and a marked capillary congestion. Frequently there is some hemorrhage into the stroma which appears as a slight spotting noticed by the patient. Within 24 hours after ovulation the glands become convoluted and true secretion appears within the gland lumina. The criteria of ovulation as shown by the endometrial biopsy are therefore, persistent capillary congestion, convolution of the glands and true secretion within the glands.

The corpus luteum continues to develop in the ruptured follicle, reaching its maximum development within 48 to 72 hours after ovulation, after which atrophy begins. The endometrial development continues with increased convolution of the glands and dilatation in the superficial portions. The glandular epithelium resumes a low columnar or placid form after the preliminary secretory activity. In the superficial zone a transformation of stroma cells occurs into a true progestional solidification.

The most common failure occurs in the stage of luteal tissue formation and rupture of the ovarian follicle.[14] Luteal tissue is frequently deficient in formation both before and after rupture. Delayed atrophy of the corpus luteum is not common. Follicular stages may frequently be abnormally prolonged, especially if the ovarian follicle does not rupture, and the endometrium attains an arrested development in the early leutenizing stage. For this reason endometrial biopsies are best obtained on the twenty-third to the twenty-fifth day of the cycle as at this time ovulation should have normally occurred, luteal changes should be well established and secretory products should be present in convoluted glands. Endometrial development after this time is of less critical importance except in delayed luteal atrophy.

If no cycle is present, as in cases of prolonged amenorrhoea, or if a prolonged period of bleeding is present, endometrial biopsies should be taken at the time of examination in order to determine the type of endometrium present in the amenorrhoea or bleeding. The latter is quite important as hemorrhage can and does occur from all stages of endometrial development.

The diagnosis of the endometrial biopsy is first a description of the endometrial pattern pre-

sented, such as resting stage, hyperplastic, preovulatory lutenizing, ovulation, post-ovulation and progestional, and second an interpretation of this pattern in terms of the day in the cycle on which the biopsy was obtained. In addition, other findings such as reduplication of glandular epithelium, cystic dilatation[15, 16] and invaginations are indicative of overstimulation and prolonged estrin effects. Edema of the stroma is characteristic of luteal failure and is quantitative in character. In this manner a biopsy showing resting endometrium at 24 days is indicative of complete ovarian insufficiency while a slight basal glycogen production at the same interval would indicate a partial ovarian insufficiency. Excessive edema indicates a premature luteal failure. Menopausal patterns are notable for their plemorphism of glandular formations. The classical "swiss cheese" pattern is largely a menopausal and post-menopausal picture and rarely occurs in younger individuals.

LABORATORY PROCEDURES

Approximately 10 percent of all patients will present historical evidence indicating the necessity for X-rays of the sella and wrists for the determination of sella size and bone age respectively. This same group of patients usually requires urinary estrin and prolan determinations in order to properly correlate the glandular picture. These and the remaining 90 percent proceed to a determination of the basal metabolic rate and the glucose tolerance test. The glucose tolerance test is made on the twenty-third to twenty-fifth day of the cycle as at this interval the ovarian hormones are normally stabilized. Repeated tests on the same patient are made on the same day of succeeding months.

GLUCOSE TOLERANCE TESTS

Glucose tolerance tests are physiological experiments in which is measured the rate at which ingested glucose enters the blood and the rate at which the body either oxidizes, stores or excretes it. The endocrine factors chiefly concerned in the regulation and consumption of glucose are the pancreas, the pituitary gland, the thyroid, the adrenals and the gonads. These multiple factors obey the controlling mechanism of the pituitary gland such that fairly constant blood sugar levels are maintained.

Experiments on dogs, notably by Houssay[17] indicate that in the denervated condition, the adrenals, the anterior lobe of the pituitary and the thyroid, when active, tend to raise blood sugar levels. Insulin from the denervated pancreas tends to lower blood sugar by regulating the consumption and storage of hepatic glycogen and accelerating the resynthesis and storage of muscle glycogen.

In glucose studies on man the influence of nervous mechanisms, especially those of the thyroid and adrenals, is controlled by a careful regulation of various extrinsic factors such as diuresis, hydration, fatigue, emotion, digestive disturbances, anxiety, hunger and physical discomforts. An individual under such basal metabolic conditions is possessed of a glucose mechanism which is almost entirely under the control of the anterior lobe of the pituitary gland, the pancreas and the gonads. Experiments on dogs have further shown that the total extripation of the pancreas always results in a severe diabetes. If the pituitary gland is also removed there is a considerable amelioration of the diabetes. In dogs in which the pituitary gland only is removed there develops a hypoglycemia to the point of death. The obvious conclusions from this work are that the pituitary gland exerts a pancreatic antagonism as its mechanism of regulation of insulin production, such that hyperactivity of the anterior lobe of the pituitary results in a hypoinsulinism of the diabetic type while hypoactivity of the pituitary results in hyperinsulinism.

Clinically applied, a measurement of the glucose mechanism affords a simple means of measuring the state of activity of the pituitary gland. However, glucose tolerance tests in the past have been long and notoriously inconclusive due to the influence of extrinsic nervous factors. The length of time required and the multiple venipunctures have contributed toward a vitiation of results.

Exton and Rose[18] have modified the glucose tolerance test by applying the paradoxical law of Allen. This law states, that, normally the ingestion of glucose stimulates the insulin-glycogen mechanism such that further ingestion of glucose is handled without further elevation of the blood sugar. If the insulin-glycogen mechanism is deranged, such as in diabetes, the first ingestion of sugar paralyses the mechanism such that further ingestion results in markedly elevated blood sugar values. The corollary to this is that in the hyperactive pituitary of the diabetic the insulin mechanism is depressed. A further corollary is that in the hypopituitary the normal antagonistic action on the pancreas is depressed so that a hyperinsulinism is present and a high tolerance to sugar obtains.

The Exton Rose glucose tolerance test is simple. With the patient under basal metabolic conditions, a fasting sample of the blood and urine are obtained, and 50 grams of anhydrous glucose in 350 cc. of chilled lemonade are ingested. This 15 percent solution of glucose affords a non-nauseating and readily digested solution. Thirty minutes later a blood sugar and urine are obtained and a second dose of 50 grams of glucose in 350 cc. of lemonade is ingested. Thirty minutes later another (and last) blood sugar and urine are obtained. The total time required is one hour and venipunctures are reduced to three.

The normal criteria are a normal fasting blood sugar with an elevation of 70 to 75 mgm. at the end of 30 minutes and not more than 5 mgm. deviation from the second blood sugar at the end of one hour. The urine should contain no sugar in any specimen. Normal blood sugar values with sugar present in the second and third urine specimens are indicative of renal or alimentary glycosuria. Hyperactivity of the pituitary (diabetic type) is characterized by an elevation above normal on the second blood specimen and a continued elevation on the third specimen. Hypoactivity of the pituitary is characterized by an elevation of less than 70 mgm. in the second blood sugar, usually decreasing on the third specimen or increasing slightly over the second. Degrees of insufficiency or hyperactivity are indicated by the degree of variation of the blood sugar curve from normal.

We have applied this procedure in a series of 177 patients upon whom 324 glucose tolerance tests have been made. The types of curves were found to consist of 37 normal curves, 213 pituitary insufficiency curves, 24 pituitary fatigue curves characterized by pituitary values on the second blood sugar with recovery at the end of the test to normal values, 32 curves of the hyperpituitary type and 18 combined curves. The combined curves were so named from hypopituitary values on the second specimen of blood with a swing past the normal to hyper-pituitary levels on the last specimen. The curves of hyper-pituitary type were named "ovarian insufficiency curves," a term justified in our knowledge that estrin from the ovary is the normal antagonist to the pituitary gland.

The series of normal cases established the correctness of the criteria established by Exton and Rose[18] and others.[19, 20, 21] The designation of pituitary insufficiency and ovarian insufficiency curves is in accordance the original observation of Davidoff and Cushing[22] using the original glucose tolerance methods. The evaluation of fatigue and combined curves has been justified by clinical response to treatment, and the endometrial biopsy correlations. Notably no ovarian fatigue nor combined curves in which ovarian insufficiency predominated have been found. The characteristics of the several types of curves are indicated in the accompanying chart. (Fig. 1.)

All glucose tolerance curves were interpreted without reference to the biopsy findings or clinical picture so that their evaluation would not be colored by preconceived ideas and facts. After evaluation and comparison with biopsy findings a remarkable parallel was found. Resting stage endometria invariably showed either marked pituitary or ovarian insufficiency curves. Endometria in which the pattern was essentially normal showed tolerance curves well within normal zones. Slight deviations from the endometrial patterns of normal tissue paralleled the findings of pituitary fatigue curves and pleomorphic patterns were usually of the combined tolerance class.

TREATMENT

Having established a reliable method of diagnosis by history, physical examination, endometrial biopsy and glucose tolerance, by which method the cause of the dysfunctions were shown, methods of treatment were considered. It is the fundamental law of endocrinology that no gland can be stimulated by its own products. In this series of cases 84 percent were found to be of pituitary origin. This fact immediately showed

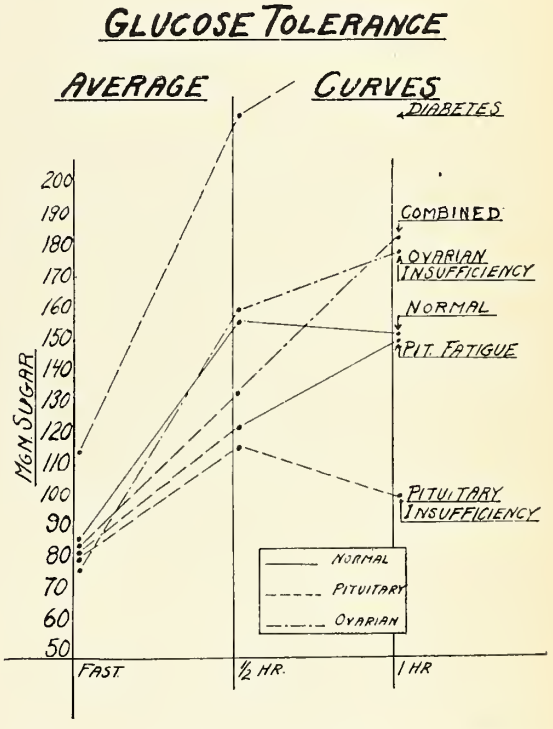


Fig. 1. The average glucose tolerance curves found in 37 normal, 213 pituitary insufficiency, 24 pituitary fatigue, 32 ovarian insufficiency and 18 combined insufficiency cases. A true diabetic curve is shown for comparison.

why symptomatic treatment resulted in failure in a corresponding percentage of cases. The use of pituitary preparations in cases of pituitary insufficiency only supplement and do not produce permanent relief of symptoms or cure. We also have observed another contraindication to substitutional therapy which is that the pituitary gland frequently undergoes further degrees of insufficiency when relieved of the necessity of functioning by substitution of its products. This may be in the nature of antihormone action.[23]

In ovarian insufficiencies, gonadotropic substances derived from the anterior pituitary lobe produce predominant follicle stimulation while those derived from pregnancy urine and placenta produce predominently stimulation of the corpus luteum. This we verified on a series of immature

white rats, using litter mates as controls and giving each rat the equivalent of one rat unit as indicated by the standardization figures for the products used such as gynantrin, prephysin, antophysin, antutrin S, follutein and APL. Accordingly these products were used in the treatment of ovarian insufficiency cases.

The treatment of pituitary insufficiency was recognized as requiring direct physical stimulation to the pituitary gland. The effect of X-ray stimulation to the pituitary gland has been reported[24, 25] and was investigated by placing immature white rats in a lead lined box such that only the pituitary region of the head was exposed to the rays. Dosage was calibrated until it was found that a dosage corresponding in the human to 200 KV, 5 MA with a 1 mm. aluminum and a 1 mm. copper filtration with a focal distance of 50 cms. and an exposure of three minutes, delivering 25 RU at the temporal skin produced in these immature rats an ovarian follicle stimulation identical with that produced with the above described pituitary substances. Treatments were given on three alternate days, making a total of 75 RU. Such treatment has been shown[26, 27] to be without harmful effect on the patient or her subsequent offspring.

This form of treatment was used on all patients showing evidence of pituitary insufficiency.* Results were evaluated by clinical findings, endometrial biopsies and repeated glucose tolerance tests, usually in six weeks. If improvement was not sufficient, the X-ray stimulation was repeated. Clinical and endometrial improvement was found to be in direct proportion to the return of the glucose tolerance curve toward normal.

SUMMARY

The efficacy of correct diagnosis and proper treatment can be summarized in the following report on the 125 cases upon whom treatment is now complete.

1—Sterility: Pituitary origin, 22 cases; pregnant 21; not pregnant 1. Ovarian origin, 6 cases; pregnant 4; not pregnant 2. Total cases, 28; pregnant 90%; not pregnant 10%.

2—Amenorrhoea: Pituitary origin, 14 cases; improved 14; not improved 0. Ovarian origin, 3 cases; improved 2; not improved 1. Total cases, 17; improved 94%; not improved 6%.

3—Hypomenorrhoea: Pituitary origin, 16 cases; improved 12; not improved 4. Ovarian origin, 3 cases; improved 3; not improved 0. Total cases, 19; improved 79%; not improved 21%.

4—Hypermenorrhoea: Pituitary origin, 40 cases; improved 39; not improved 1. Ovarian origin, 10 cases; improved 10; not improved 0. Total cases, 50; improved 98%; not improved, 2%.

5—Dysmenorrhoea: Pituitary origin, 7 cases; improved 5; not improved 2. Ovarian origin, 4 cases; improved 4; not improved 0. Total cases, 11; improved 82%; not improved 18%.

6—All cases: Improvement in 88.6%; not improved in 11.4%.

CONCLUSIONS

1. The proper evaluation of the endocrine patient requires a well directed history and physical examination plus a study of the endomentrial biopsies and glucose tolerance.

2. In only 10 percent is additional examination necessary to arrive at the correct diagnosis.

3. A correctly established diagnosis indicates the necessary treatment.

4. Pituitary gland stimulation is best accomplished by means of the X-ray.

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*Dr. E. T. Kirkendall, who gave these treatments, provides this comment: "We deliver to the patient 140 KV, 10MA, through 1 mm Cu and 1 mm Al, using a 6x8 cm aperature for the pituitary and a 10x15 cm aperature for the ovary, at 50 cms FSD, a dosage of approximately 35 units on the skin and approximately 10 units to the pituitary gland. The ovarian dosage on the skin must be higher because the depth is greater in most cases. Pituitary cases are all radiated alike but the exposure to the ovaries depends upon the depth of the pelvis. Three exposures are given at about 48 hour intervals."

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A CLASSIFICATION OF TUMORS

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Foreword by JAMES EWING, M.D., NEW YORK CITY

THERE is much value in a uniform nomenclature of tumors and even greater value in knowing what tumors actually occur in the different organs. Neither of these tasks can be accomplished with finality in the present state of knowledge but in the classification and plan of nomenclature and regional grouping of tumors compiled by Dr. Pomeroy, he has gone a long way toward this end and provided a valuable working scheme for the tumor pathologist. This system may be heartily recommended.

Any alterations required to meet increasing knowledge and changes in usage could readily be made, and in this manner a standard system of nomenclature and classification would be produced which would meet all requirements and be kept up to date.—JAMES EWING.
New York City.

INTRODUCTION

The purpose of this classification is not to present something new, but to correlate existing classifications of tumors. It is an effort to get the internist, pathologist, radiologist and surgeon to "talk the same language" when discussing tumors. The existence of numerous more or less synonymous terms such as "undifferentiated", "fat spindle", "unripe" and "embryonal" applied to the cells in carcinoma of the uterine cervix is but one instance of the confusion that exists at present.

The general arrangement follows, with minor changes, the plan used in the American Journal of Cancer.

The textbook of Ewing, Karsner and Stout and various articles of Geschickter have been consulted and quoted freely. Most of the references to secondary tumors are from the book of Willis. This Australian pathologist has emphasized the necessity of considering every tumor, even one obviously primary, as possibly being metastatic from a tumor primary elsewhere in the body.

Dr. James Ewing and Dr. Howard Karsner have made many helpful suggestions and Dr. Alan Moritz is largely responsible for the sections on tumors of the skin and the nervous system.

* * *

TUMORS OF SKIN

SECTION A

The nomenclature of skin tumors is the result of an independent evolution and does not conform with the broader views of the nature of tumors recognized in the field of general pathology. To bring the nomenclature of skin tumors in closer accord with the general nomenclature of tumors, the following outline is suggested:

I. Epithelial Tumors

A. Benign Tumor

1. Papilloma
2. Sebaceous adenoma
3. Sweat gland adenoma
4. Epidermoid cyst ("implantation cyst", usually traumatic, may be congenital) (Mason)[32]
5. Dermoid cyst
6. Sebaceous cyst
7. Sweat gland cyst

B. Malignant Tumor

1. Basal cell carcinoma
   a. Common basal cell carcinoma
      1. Proliferative type
      2. Destructive type (rodent ulcer)
   b. Epithelioma Adenoides Cysticum of Brooke (probable origin in hair follicle or sebaceous gland)

This should be distinguished from Adenoid Cystic Carcinoma (Spies)[16]; which may be cutaneous or noncutaneous, and in the latter situation is usually malignant.

   c. Cylindroma (a nevus arising from embryonal rest)

2. Squamous cell carcinoma
   a. Well differentiated
   b. Partially differentiated
   c. Undifferentiated
3. Mixed basal and squamous cell carcinoma
4. So-called "Precancerous" Dermatoses

For many investigators who believe that they have seen Bowen's and Paget's disease begin as true cancer cells, these affections should be classified as cancer (McCarthy)[33]

   a. Paget's Disease (occasionally in regions other than the nipple)
   b. Bowen's Disease (dyskeratosis, intracellular edema, numerous mitotic figures, giant cells)

C. Secondary Tumor

Carcinoma of breast and stomach are the most common primary tumors (Willis)[58]

II. Connective Tissue Tumors

A. Benign Tumor

1. Fibroma (including keloid, which is tentatively regarded as tumor by most investigators)

Histiocytoma can usually be differentiated from fibroma only by vital staining with colloidal iron (Senear and Caro)[44]

2. Myxoma
3. Lipoma
4. Xanthoma
5. Neurofibroma

The majority of cutaneous fibromas are now known to originate in the perineurium or the interstitial tissue of the peripheral nerves, and are therefore called "neurofibromas" (Andrews)[2]

6. Hemangioma (clinically many subtypes: "nevus" flammeus, "nevus" vasculosus, angioma cavernosum and "nevus" araneus)
7. Lymphangioma
8. Hemangioendothelioma
9. Lymphangioendothelioma

B. Malignant Tumor

1. Spindle cell sarcoma
2. Fibrosarcoma
3. Liposarcoma
4. Neurogenic sarcoma
5. Hemangioendothelial sarcoma
6. Lymphangioendothelial sarcoma
7. Kaposi's disease (question as to whether sarcoma or not)

C. Secondary Tumor

1. Sarcoma (sarcoma of bone and lymphosarcoma may metastasize to the skin (Willis))[58]
2. Myeloid Leucemia (leucosis)
3. Lymphoid Leucemia (leucosis)
4. Hodgkin's disease
5. Mycosis fungoides (if any case is definitely shown to be a cutaneous manifestation of Hodgkin's disease or of lymphosarcoma it should be so named)

III. Tumors of the Pigment Forming Tissues

It is quite generally accepted that the nevus cell is the parent cell of the melanoma, but the origin of the nevus cells is still a controversial question. In both the benign and malignant forms of tumors arising from pigment forming tissues, the amount of pigment is extremely variable. The designation of a tumor as a nevus or melanoma, is dependent upon the type of cell rather than upon the presence of pigment.

A. Benign Tumor

1. Nevus (There are many varieties including pigmented and non-pigmented, angiomatous, hairy, fibrous and papilliferous forms)

B. Malignant Tumor

1. Malignant melanoma or melanoblastoma

C. Secondary Tumor (malignant melanoma may metastasize to the skin (Willis))[58]

TUMORS OF EYE AND ORBIT

SECTION B

1. EYE

I. Lids

The eyelids are involved by tumors of the same types that are found in the skin of other regions.

Adenoma of Meibomian glands is extremely rare.

II. Conjunctiva

A. Lipoma
B. Hemangioma
C. Papilloma
D. Carcinoma
1. Squamous Cell Carcinoma
2. Cylindrical Cell Type
a. Carcinoma Simplex
b. Adenocarcinoma
E. Sarcoma (see Section U).
F. Melanoma

III. Sclera

A. Fibroma
B. Sarcoma (very rare) (see Section U).

IV. Iris and Ciliary Body

A. Myoma
B. Carcinoma
1. Carcinoma Simplex
2. Adenocarcinoma
C. Sarcoma (see Section U).
1. Myosarcoma
D. Melanoma

V. Choroid

A. Angioma
B. Sarcoma (see Section U).
C. Melanoma

VI. Retina

A. Glioma (Retinoblastoma or Retinocytoma)

B. Neuro-epithelioma

C. Tumors associated with Tuberous Sclerosis

D. Sarcoma (rare) (see Section U).

VII. Optic Nerve

A. Glioma
1. Myxosarcoma (myxoglioma)
2. Fibrosarcoma
3. Gliosarcoma

B. Neurogenic Sarcoma

C. Melanoma

VIII. Secondary Tumor (rare)

Cancer of breast is most common primary site. Choroid is the part of the eye usually involved first (Willis)[58]

2. ORBIT

I. Fibroma

II. Myxoma

III. Lipoma

IV. Osteoma

V. Dermoid Cyst

VI. Hemangioma

VII. Mixed Tumor (Epithelial Tumor of Salivary Gland Type)

The usual site of origin is the lacrimal gland.

VIII. Sarcoma (see Section U).

Lymphosarcoma is the most common type

IX. Chloroma

X. Melanoma

XI. Secondary Tumor

Carcinoma of the breast is the most common primary site. (Stout)[52]
In infants an orbital tumor is almost pathognomonic of a Sympathicoblastoma of the adrenal medulla (Grollman)[22]

TUMORS OF EAR

SECTION C

I. Auricle

The auricle is involved by tumors of the same types that are found in the skin of other regions.
Chondromas of the auricle are not supposed to exist (Jackson)[24].

II. External Auditory Canal

In addition to the usual skin tumors chondroma and osteoma are reported.

III. Middle Ear (extremely rare)

Carcinoma and sarcoma are reported.
Cholesteatoma

IV. Internal Ear

Tumors are excessively rare but the labyrinth may be involved in the leucemias (leucoses).

V. Secondary Tumor

Involvement of the external auditory canal by tumor metastatic from a latent renal carcinoma is reported.
The middle ear and surrounding bone may be involved by metastasis from cancer of the breast (Willis)[58].

TUMORS OF BREAST

SECTION D

Some lesions that are not tumors are included to make the classification more clear.

I. Hypertrophy

A. Female
1. Infantile
2. Puberty
3. Adult

B. Male

II. Physiological Epithelial Hyperplasia (mazoplazia of Cheatle & Cutler)

III. Abnormal Involution (chronic cystic mastitis, senile parenchymatous hypertrophy, Schimmelbusch's disease, residual lactation acini)

IV. Miscellaneous Lesions

A. Hematoma

B. Fat Necrosis

C. Plasma Cell Mastitis of Adair[1]

V. Cysts

A. Galactocele

B. Simple Cyst (blue dome cyst of Bloodgood)

C. Papilliferous Cyst

D. "Cystosarcoma Phyllodes", probably not malignant

VI. Benign Tumors

A. Adenofiboma (there is doubt that all of these are actual neoplasms)

B. Adenoma (rare)

C. Fibroma (rare)

D. Lipoma

E. Myxoma

F. Angioma

VII. Carcinoma

A. Adenocarcinoma (may be mucinous)
1. Well differentiated
2. Partially differentiated
3. Undifferentiated

B. Duct Carcinoma (local or diffuse)
1. Well differentiated
2. Partially differentiated
3. Undifferentiated

C. Sweat Gland Carcinoma
1. Well differentiated
2. Partially differentiated
3. Undifferentiated

In the undifferentiated type of groups A. B. and C. assignment to a definite group may be impossible and "carcinoma simplex" may be the only diagnosis possible.

In some cases the term medullary, schirrhus or comedo may be used to give additional gross description of the tumor.

D. Paget's Disease (usually starts as intramammary duct carcinoma)

E. "Infammatory Carcinoma" (as described by Lee and Tannenbaum)[28]

It is necessary to emphasize the fact that this tumor is inflammatory in external appearance only. The appearance of the skin is due to diffuse involvement of the lymphatics of the skin by a cancer involving the breast, there being no characteristic type of tumor.

VIII. Sarcoma (rare) (see Section U).

A. Spindle Cell

B. Round Cell (must be carefully differentiated from epithelial tumor)

C. Carcinoma-Sarcoma

IX. Secondary Tumor, from a growth primary in the opposite breast is not uncommon. Secondary melanotic tumors are reported (Willis)[58]

THE ORAL CAVITY AND UPPER RESPIRATORY TRACT

SECTION E

1. TUMORS OF NASAL AND PARANASAL CAVITIES

This classification is based on that of Geschickter[16]

I. Polyp

Most of these are inflammatory although sometimes classed as fibro-epithelial tumors.

II. Fibroma

Nasopharyngeal fibroma originates at the base of the skull or from the fibro-cartilages of the upper cervical vertebrae.

III. Chondroma

IV. Osteoma

V. Hemangioma

VI. Plasmocytoma

VII. Papilloma (rare)

The dividing line between papillomas and inflammatory nasal polyps on the one hand and between papillomas and papillary carcinoma on the other hand is not distinct (Geschickter)[16]

VIII. Cystadenoma

IX. Aberrant Salivary Tumor (benign)

X. Carcinoma

A. Squamous Cell Carcinoma
1. Well differentiated
2. Partially differentiated
3. Undifferentiated

B. Transitional Cell Carcinoma

C. Lympho-epithelioma

D. Adenocarcinoma
1. Well differentiated
2. Partially differentiated
3. Undifferentiated

The origin of some of these tumors has been traced to the Schneiderian membrane.

E. Cystic Basal Cell Carcinoma

These usually resemble malignant tumors of the salivary glands.

XI. Glioma

Nasal glioma (olfactory bulb)

Some cases have many ganglionic cells but in others there are rosettes of neuro-epithelium. The cellular tumors are highly radiosensitive (Ewing)[10]

XII. Sarcoma (see Section U).

XIII. Secondary Tumor

Primary lung carcinoma metastatic to the nasal cavity has been reported (Willis)[58]

2. TUMORS OF MOUTH AND PHARYNX

I. Fibroma

II. Myxoma

III. Lipoma

IV. Chondroma

V. Myoma

A. Leiomyoma

B. Rhabdomyoma

VI. Papilloma

VII. Angioma

A. Hemangioma

B. Lymphangioma

VIII. Epulis.

A. Giant Cell Epulis

B. Fibrous Epulis

IX. Tumors of Dental Origin

(See Tumors of the Jaws under Tumors of Bone, Section S).

X. Cyst
- A. Mucous Cyst
- B. Ranula (due to occlusion of salivary duct)
- C. Thyroglossal Cyst
- D. Dermoid Cyst

XI. Adenoma

Some thyroid and parathyroid tumors (due to fetal inclusion) have been described as adenomas.

XII. Aberrant Salivary Tumor (benign)

XIII. Carcinoma
- A. Squamous Cell Carcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- B. Transitional Cell Carcinoma
- C. Lympho-epithelioma
- D. Adenocarcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- E. Cystic Basal Cell Carcinoma

These usually resemble malignant tumors of the salivary glands.

XIV. Sarcoma (see Section U).

All forms of sarcoma, except lymphosarcoma, are rare.

XV. Secondary Tumor

A gingival metastasis from a renal carcinoma may grossly resemble an epulis (Willis)[58]

3. TUMORS OF LARYNX AND TRACHEA

I. Fibroma

II. Angioma (rare)

III. Papilloma (common in larynx)

IV. Chondroma

V. Carcinoma

Extrinsic laryngeal carcinoma is more varied in morphology than the intrinsic type, resembling pharyngeal carcinoma in many cases.
- A. Squamous Cell Carcinoma
  1. Well differentiated
  2. Paritally differentiated
  3. Undifferentiated
- B. Adenocarcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated

VI. Sarcoma (rare) (see Section U)

VII. Secondary Tumor

True metastic tumors of the larynx and trachea are very rare (Willis)[58]

TUMORS OF SALIVARY GLANDS
SECTION F

I. Fibroma (rare)

II. Adenoma (rare)

III. Cystadenoma
- A. Papillary Cystadenoma Lymphomatosum (Warthin)[56] (possibly a heterotopia of pharyngeal entoderm)
- B. "Orbital Inclusion" Cyst (Kraissl[27] and Stout) (a lympho-epithelial tumor (A above) but supposed to originate in "orbital inclusion")

IV. Carcinoma

Whatever may be their relation to the mixed tumors, pure carcinomas of the salivary glands are highly characteristic both clinically and histologically (Ewing)[10].
- A. Alveolar Carcinoma (usually of basal cell type)
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated, including the round cell carcinoma
- B. Adenocarcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated

V. Sarcoma (excessively rare) (see Section U).

"Mikulicz's Disease" is a chronic inflammation and not lymphosarcoma.

VI. Mixed Tumor (epithelial tumor of salivary gland type, endothial origin disproved)

The commonly used term "mixed tumor" is employed in this classification although "it is probable that the tumor is not a mixed tumor but wholly epithelial in origin and to be referred to as epithelial tumors of salivary gland type" (Karsner)[25]

Although the entire series is connected by transitional cases a serviceable classification may be given as follows (Ewing)[10].
- A. Myxochondrocarcinoma
- B. Epidermoid carcinoma with hyaline stroma
- C. Adenocarcinoma

According to this view, many of the salivary tumors are pure adenocarcinomas with peculiar and exceptional metaplasia and not requiring any periosteal or other mesoblastic derivative in their cells of origin. However violently this interpretation may conflict with long established views regarding tissue

growth, it appears to be necessary to accept the facts so well attested by a close study of these tumors (Ewing)[10].

VII. Secondary Tumor

Carcinoma of the lung and choriocarcinoma have furnished metastases to the salivary glands (Willis)[58].

Carcinoma of the mouth may metastasize to the salivary glands.

TUMORS OF THYROID GLAND
SECTION G

I. **Fibroma** (rare)

II. **Osteochondroma** (rare)

III. **Adenoma**

IV. **Carcinoma**

A. Sequamous Cell Carcinoma

(probably arises from thyro-glossal duct, possibly by metaplasia of cells of thyroid).

B. Scirrhous Carcinoma (no invasion of blood vessels).

C. Papilliferous Adenocarcinoma (no invasion of blood vessels)

D. "Malignant Adenoma" of Graham (invasion of blood vessels)

This tumor usually arises in a pre-existing adenoma.

The morphological character of the cells and tissue is an unreliable basis for the determination of malignancy of thyroid epithelial tumors, adenomatous in character.

The most constant single indication of thyroid epithelial malignancy is invasion of the blood vessels (Graham)[19].

V. **Sarcoma** (rare) (see Section U).

It is probable that a careful study of many cases heretofore called spindle cell sarcoma might show that they belong to the group of Carcinomas (Karsner)[25]

VI. **Miscellaneous Tumors and Similar Lesions**

A. Benign Granuloma (Riedel's Struma, not a tumor)

B. Struma Postbranchialis (small alveolar, large cell adenoma or adenocarcinoma) (Getzowa)

C. Parastruma (cells resemble those of parathyroid) (Hürthle)

D. "Metastasizing Colloid Goiter" ("Metastasizing Normal Thyroid Metastasizing Adenoma")

Blood vessel invasion and not morphology of the tumor cells is the true indication of malignancy.

E. Carcinoma-sarcoma

This may be entirely a carcinoma, an actual coexistence of independent malignant tumors or a teratoma.

F. Lateral Cervical Tumor of Aberrant Thyroid Tissue (Moritz[37] and Bayless)

VII. **Secondary Tumors** (from carcinoma of lung, larynx and breast, melanoma and carcinoma of kidney) (Willis)[58] (Ewing)[11])

TUMORS OF PARATHYROID GLAND
SECTION G

I. **Adenoma**

"The border line between hyperplasia and adenoma is hard to define" (Karsner))[25].

Hyperplasia is usually found in rickets and osteomalacia while adenoma is usually associated with generalized osteitis fibrosa (Shelling)[45].

II. **Adenocarcinoma** (cells may be multinucleated or show spindle forms)

III. **Secondary Tumor** (origin from carcinoma of the breast has been described) (Willis)[58].

TUMORS OF THYMUS (rare)
SECTION H

I. **Lipoma**

II. **Myxoma**

III. Cyst

A. Simple Cyst (lined by ciliated columnar epithelium)

B. Dermoid Cyst

IV. **Thymoma** (sometimes called lymphosarcoma or "malignant thymus tumor", possibly a carcinoma)

Since the origin of the round cells comprising this tumor is in doubt the term thymoma is preferred.

V. **Carcinoma** (composed mainly of large cells of epithelial type, possibly derived from cells of Hassal's corpuscles, stroma cells are epithelial)

VI. **Sarcoma** (see Section U).

A. Spindle cell

B. Myxosarcoma

VII. **Secondary Tumor** (excessively rare)

I know of no fully described example of genuine metastasis in the thymus (Willis)[58].

INTRATHORACIC TUMORS
TUMORS OF HEART
SECTION I

I. **Myxoma**

II. **Fibroma**

III. **Rhabdomyoma**

IV. **Sarcoma** (see Section U).

V. **Endothelioma of Pericardium**

(Continued in June Issue)

CASE RECORD PRESENTING CLINICAL PROBLEMS

A Girl Aged 4—Malnutrition Anemia, Diarrhea, Pulmonary Infection, Death.

By HARRY L. REINHART, M.D.

A WHITE girl, four years old, was brought to the hospital because of malnutrition and anemia. The child was a full term baby, born in the home by spontaneous delivery. She weighed 6¾ pounds at birth and was jaundiced during the first few days of her life. She was a breast fed baby but did not "do well", and was put on a formula of powdered milk. She never developed properly and was a constant feeding problem. She had repeated attacks of diarrhea after one year of age, which were occasionally bloody, and one "nearly fatal attack of cholera infantum". There was a recurrence of diarrhea about four months prior to admission. The diarrhea persisted and was characterized by an average of five bulky, foul stools per 24 hours. She had whooping cough, pneumonia and measles between the ages of three and nine months. She walked at 18 months, talked at two years and her general development was subnormal.

Physical examination revealed a poorly developed and very poorly nourished white female child, estimated to be about two years of age. Temperature was 100.2°, pulse 120 and respirations 30. The skin was pale, thin, transparent and the tissue turgor was poor. Examination of the mouth and throat revealed a pallor of the lips, coated tongue, foul breath, congested pharynx, enlarged and injected tonsils, and teeth which were dirty but not carious. The anterior cervical lymph nodes were enlarged. The ribs were prominent, due to the poor nourishment. Examination of the lungs revealed a normal percussion note, a pleural friction rub on the right side and numerous coarse crackling rales throughout both lungs. There was no evidence of organic heart disease.

The abdomen was large, rounded and distended; the superficial veins of the anterior abdominal wall were prominent, and the liver was palpable one finger-breadth below the right costal margin. The extremities were poorly developed and emaciated and the fingers were definitely clubbed. Deep reflexes were absent.

Laboratory studies on admission revealed a hemoglobin value of 8.7 grams; red blood cells were 3,060,000 with 5.6 per cent reticulocytes; white blood cells were 36,000 with 68 per cent polymorphonuclears, 25 per cent lymphocytes and 7 per cent monocytes; blood platelets were 502/1000 red blood cells. The Wassermann and Kahn reactions were negative. The urine was acid, specific gravity 1.020, albumin 10 mgm. per cent, a trace of sugar, no acetone and no red or white blood cells, or casts were noted. The stools were copious, yellowish-gray in color, pasty or soapy in consistency, of a very foul odor, and varied in number from 2 to 9 per 24 hours. Occult blood was present in the stools. Neither ova nor parasites were demonstrated. An X-ray examination of the lungs revealed diffuse irregular densities which were interpreted as "extensive pulmonary tuberculosis". Other pertinent laboratory findings were a low blood calcium, a slightly lowered blood sugar and a normal blood cholesterol. The passage time of food through the intestines was 27 hours as indicated by the appearance of ingested carmine in the stools. X-ray examination of the bones presented no evidence of pathology; barium enema revealed a dilated atonic colon and intestines markedly distended by gas.

Progress Notes: On admission a general diet was given and in addition brewer's yeast, egg and milk and vitamins A,B,C, and D, by mouth or parenterally. The child's disposition was irritable and her appetite capricious; the general diet and vitamins by mouth were frequently refused or vomited. She ran a low-grade temperature and her anemia increased. She was given a transfusion of 250 cc. of whole citrated blood. Her liver slowly and progressively enlarged and the spleen became palpably enlarged. Stools varied in color from gray to brown and in consistency from liquid to semi-solid. The general clinical picture led to the tentative diagnosis of "celiac disease" for which a high protein diet, consisting of cottage cheese, eggs, skimmed milk and bananas was offered. Stimulation of the appetite was attempted by the subcutaneous injection of 3 units of standard insulin one-half hour before each meal. These measures were unsuccessful. The pulmonary infection increased and a step-like rise in temperature developed and evolved to a septic type with daily fluctuations from 98° to 104°. She died on her 46th hospital day, apparently from her pulmonary infection.

Dr. D. L. Mahanna, Commentator

The clincal picture as presented is suggestive of "celiac disease", but careful study reveals several significant deviations from the typical case.

"Celiac disease" usually begins as a feeding problem at one to two years of age, after a long period of irregular or ill-advised feeding or parenteral infection or both, but rarely begins in a breast fed infant soon after birth. Chemical examination of the stools reveals an excess of fat, but the percentage of neutral fat is normal, i.e., not more than 25 per cent. The increase of fat is composed mainly of fatty acids and soaps, which are the results of the action of the fat-splitting enzymes of the pancreatic secretion. Hence "celiac disease" predicates a normally functioning pancreas. The abnormality is considered to be a "functional" disturbance in the assimilation of fat, the exact nature of which is as yet unknown.

Fundamentally there is little difference in the

This is the twenty-eighth of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

clinical picture of an individual who is starving to death because of lack of food or because of some digestive failure. This failure may be due to lack of digestive juices, to such a rapid passage of food through the intestinal tract that there is insufficient time for absorption, to failure of absorption because of a disease of the intestinal mucosa, or to a blockade of the lacteals preventing assimilation and availability to the body. In all events the individual is starving. In the type of cases under consideration these obervations apply particularly to one class of foods, namely fat. While the rate of fat starvation may be very slow, the more immediate effects are those of vitamin deficiency and anemia which are superimposed on the background of chronic malabsorption of fat. Such individuals are particularly susceptible to secondary infections, which are frequent, severe and often fatal. The importance of determining the exact nature of the primary disturbance, if possible, should be apparent since effective therapy and the ultimate prognosis depends upon this rather than the treatment of the secondary manifestations such as the infections, anemias or vitamin deficiencies.

The mortality of "celiac disease" is very low and deaths which occur are frequently due to an intercurrent infection, such as bronchopneumonia. The prognosis, with proper and prolonged care, is good.

"Pancreatic steatorrhea" is due to the absence or diminution of pancreatic secretion and may present a syndrome similar to "celiac disease". Although not confined to infancy it is seen perhaps most frequently at this age. The infantile type is characteristically manifest shortly after birth, often appearing in breast fed as well as artificially fed infants. Chemical examination of the stools reveals an excess of fat which is predominantly of neutral fat, (i.e., more than 25 per cent). Fatty acids and soaps are decreased both relatively and absolutely, indicating absence or diminution of fat-splitting enzymes, and therefore, an impaired pancreatic function. As in "celiac disease", the resistance to infections is low and vitamin deficiencies and anemia are frequent. The prognosis has been generally considered poor; indeed, it is quite probable that these patients never spontaneously recover from their digestive abnormality. There is an increasing amount of clinical and experimental evidence that steatorrhea and cases with diarrhea due to pancreatic insufficiency may be controlled by the administration of potent pancreatic enzymes.

In summary, there is a well known syndrome, variously called "celiac disease", "pancreatic infantilism", "Chronic intestinal indigestion", etc., which may be divided clinically into two distinct groups. The majority of these cases fall into the class of "celiac disease", and a small number, including this case, into the class of "pancreatic steatorrhea". The differentiation lies in the age of the onset, history of feeding disturbance in a breast fed infant, in the progress and outcome of the case, and in the chemical examination of the stools. It is very important that a fat-tolerance test be done, i.e., that a diet having a high fat content be given during the period when the stools are to be examined for the relative and total fat content, and for the relative and total content of neutral fats, fatty acids and soaps.

Dr. Reinhart:

This clinical history and case discussion may seem to imply that this symptom complex is confined to a restricted highly specialized field of Medicine. The more general and practical applications are seen in all cases presenting evidence of diarrhea, anemia and malnutrition. If such a symptom complex occurs in an infant or young child, and the child survives, "celiac disease" is usually postulated. If the child dies, tuberculosis or perhaps "pancreatic steatorrhea" is postulated.

Should such a complex appear in an adult in the tropics, sprue is suggested while in the temperate zone, bacillary dysentery, pernicious anemia, vitamin deficiency or perhaps "nontropical sprue" are considered according to the predominance of certain symptoms. The diarrhea of "pancreatic insufficiency" in adults is well defined and not uncommon.

It should be apparent that there are a multitude of functional and organic disturbances which may present a very similar symptom complex.

Anatomic Diagnosis:

1. Marked atrophy of pancreatic glandular tissue with diffuse fibrosis of pancreas.
2. Massive fatty infiltration of liver.
3. Broncho-pulmonary moniliasis.

Atrophy of pancreatic glandular tissue without evidence of disturbance of the islands of Langerhans is the anatomical picture produced by experimental ligation of the pancreatic duct; such a picture is also encountered in cases of occlusion of the pancreatic duct by stones in both adults and children. The anatomical diagnosis and symptom complex as presented comprise the characteristic picture of "pancreatic steatorrhea". While the etiology of the glandular atrophy and fibrosis of the pancreas may not be demonstrable, as in this case, stones in the pancreatic duct, congenital stenosis of the duct and infections are the most frequent causes. The ensuing pathology and symptomatology are the result of a lack of pancreatic secretion, marked disturbance of fat absorption and metabolism, vitamin deficiency, anemia, fatty metamorphosis of the liver and secondary infections. Although broncho-pulmonary moniliasis was present, and the association of monilia and sprue is very frequent, moniliasis is usually considered as a secondary infection rather than the primary cause of sprue.

TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by the Component Society, the Ohio Public Health Association

DIFFICULTIES ENCCUNTERED IN INDUSTRY

Enlightened industry nowadays realizes that it must carry a certain number of sub-normal individuals. In the long run this is sound economic policy, for industry cannot afford to lose trained employes nor to breed psychological unrest of workers caused by the knowledge that loss of employment will follow serious or prolonged illness. Yet the employment of workers who have tuberculosis, or have recovered from the disease, is an exceedingly awkward problem for tuberculosis is insidious and infectious and leaves its sufferers incapable of normal physical effort for long periods.

Economic difficulties experienced by the tuberculous wage earner are serious. They are partially relieved by continuing part wages. Treatment in the sanatorium is rendered easier and more effective if the worker is relieved of immediate worry and is given hope for the future. It reduces the temptation to return to work too soon.

Environmental difficulties are particularly acute in working-class areas. The problems of slums, overcrowding and undernourishment are being solved by the slow social evolution now going on.

Difficulties arising out of the patient's own attitude include, (a) fear of losing his income, (b) his job, and (c) fear of the sanatorium. These fears can be greatly allayed if the policy of the firm is to take back employes when they have recovered. The dread of the sanatorium can usually be overcome by education and wise propaganda.

The difficulty of returning to a different kind of work than that to which they have been accustomed must be faced by some workers. A man must know that his job is a real one and not one created merely to find him employment.

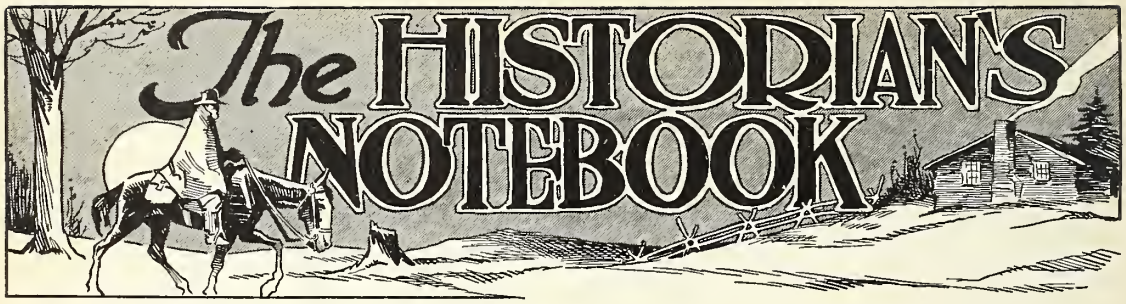
The employer's difficulties must be faced squarely. The returning tuberculous patient has usually a greatly reduced efficiency. He is inferior to the normal worker and this inferiority is likely to persist for a few years. If he attempts to keep pace with fellow workmen he invites early breakdown. Industry quite naturally, is not likely to welcome the worker who needs a sheltered life if he is a new entrant but most employers will take back old employes if the prospect of eventual return to reasonably good health exists. Of course, industry has to deal with many employes disabled by conditions other than tuberculosis. With these "crocks" the returning tuberculous worker has to compete for the suitable jobs. Many are the employer's problems in adapting the needs of industry to the employee who cannot be subjected to strains such as overtime work, shift and night work, and competition with more vigorous workers.

It is, of course, not possible to pay higher wages to the tuberculous patient than to other workers. In fact he must often be satisfied with a lesser wage. This means that at the very time he needs a higher and better standard of living, he actually has to be content with a much lower one. This situation calls for generous cooperation between the employer and the Care Committee (well organized in England). The tuberculous patient returning to industry should be subsidized until he is able to earn a reasonable wage. Industry cannot be expected to make the subsidy directly.

The danger of infecting other employes must also receive attention. A patient with a positive sputum should not be allowed to return to surroundings where he may infect others. Certainly he should not be permitted to engage in industry involving the handling or packing of food or which requires him to come into contact with the public.

The author urges close liaison between the tuberculosis service and industry. Small firms find it particularly difficult to deal with recovered tuberculous patients but can do much if the facts about tuberculosis are carefully explained to them by the medical officer or doctor. The doctor must not only be conversant with the disease but must also possess an intimate knowledge of the industry and requirements of the workers if he is to talk reasonably and convincingly with the management.—Difficulties Encountered in Industry in Dealing with the Tuberculosis Problem, Ronald E. Lane, M.B., M.R.C.P., Tubercle, Vol. XIX, No. 3, December, 1937.

According to the *Medical Woman's Journal*, of the 2,155,105 live births registered in 1935 in the United States, 1,888,012 (88 per cent) were white infants and 255,124 (12 per cent) were negro infants. Of the negro live births in 1935, 56 per cent were attended by midwives and 43 per cent by physicians. Only 17 per cent of the negro live births occurred in hospitals. Approximately two-thirds of the negro infants were born in rural areas of the South. Of the white live births 94 per cent were attended by physicians, and 40 per cent by physicians in hospitals.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

THE FIRST MEDICAL CONVENTION IN OHIO

By ROBERT G. PATERSON, Ph.D., Columbus, Ohio

SINCE the publication of an article entitled "Early Medical Organization in Ohio—Its First Publication" in the January (1938) number of the Journal two events of significance throwing light upon the subject have occurred.

The first event was the receipt of an interesting letter from L. S. Deitchman, M.D., Youngstown, Ohio, stating that he possessed a copy of the Proceedings of 1829 described in the article and that it was found in an attic.

The second event of vast importance to the early history of medical organization in Ohio was the location of a copy of the Proceedings of 1827 in a catalogue of Americana issued by Goodspeed's Book Shop, Boston, Mass. The pamphlet is now in the library of the Ohio State Archaeological and Historical Society where it forms a part of the early medical collection being assembled by the Ohio Committee on the History of Medicine and Archives.

At the present writing there seem to be four distinct phases in the history of medical organization in Ohio.

FIRST — THE LEGAL PHASE — 1811-1833

	Year	Date	Place
1.	1812	November 2	Chillicothe

Titled "The President and Fellows of the Medical Society of Ohio"

No meeting was held due to lack of a quorum.

2. 1821 June 4 Columbus

Titled "The Medical Convention of Ohio"

If printed proceedings were published there is no record of them, so far as can be ascertained.

3. 1827 December 10-12 Columbus

Titled "General Representative Convention of the Medical Societies of the State of Ohio".

Proceedings entitled "The Proceedings of the Medical State Convention". Printed by Adam Peters, Zanesville, Ohio, 1828.

First Constitution adopted.

In possession of the Ohio Committee on Medical History and Archives of Ohio State Archaeological and Historical Society.

4. 1829 January 5-9 Columbus

Titled "General Medical Society of the State of Ohio".

Proceedings entitled "The Proceedings of the General Medical Society."

Printed by Olmsted, Bailbache and Camron, Columbus, Ohio, 1829.

Photostatic copy in possession of "Committee on Medical History and Archives." Any copies of this volume will be received with appreciation and lodged safely by the Ohio Committee on Medical History and Archives.

5. 1831 January Columbus

No printed proceedings discovered.

6. 1833 January 9 Columbus

No printed proceedings discovered.

The Author

● Robert G. Paterson, Ph.D., is executive secretary of the Ohio Public Health Association, and professor in the School of Social Administration, Ohio State University.

Readers desiring reprints of articles appearing in this department must place their order with The Journal within 15 days after date of publication.

SECOND — THE VOLUNTARY PHASE — 1835-51

	Year	Date	Place
1.	1835	January 5-7	Columbus
2.	1838	January 1-3	Columbus
3.	1839	May 14-15	Cleveland
4.	1841	May 5-7	Columbus
5.	1842	May 16-20	Cincinnati
6.	1843	May 6-11	Lancaster
7.	1844	May 28-30	Mt. Vernon
8.	1845	May 20-22	Columbus
9.	1846	May 12-14	Columbus
10.	1847	May 16-20	Columbus
11.	1848	May 16-18	Columbus
12.	1849	June 5-7	Columbus
13.	1850	June 4-6	Columbus
14.	1851	June 3	Columbus

Copies of the proceedings or transactions or written minutes of any of these conventions are sought by the "Ohio Committee on Medical History and Archives."

THIRD 1846-1904

THE OHIO STATE MEDICAL SOCIETY

It will be noted that sessions of the Medical Convention of Ohio and the Ohio State Medical Society were held concurrently from 1846 to 1851 after which the Medical Convention of Ohio merged with the Ohio State Medical Society.

A new constitution was adopted on Thursday evening, May 14, 1846. It provided for regular annual meetings in Columbus on the first Tuesday in June.

Articles of Incorporation were issued to the Society on February 22, 1848.

On May 28, 1902, a new Constitution and By-Laws was adopted which changed the name of the organization to the Ohio State Medical Association.

Proceedings of the Society were published annually in a volume titled "Transactions of the Ohio State Medical Society". Any of these volumes prior to 1880 will be received with appreciation by the "Committee on Medical History and Archives."

FOURTH 1905 TO DATE

THE OHIO STATE MEDICAL ASSOCIATION

On May 19, 1904, a report of a committee on publication recommended the abandonment of the publication of the proceedings in the annual volume of Transactions and the establishment of an official organ. The last of the "Transactions" was published in 1904. The Ohio State Medical Journal began Volume 1, No. 1, in July, 1905, and has continued to date.

Any one having any written or printed records relating to the history, and especially the early history, of medical organization, state, district or local, in Ohio is urged to communicate with the Editor of The Journal.

The Committee on Medical History of the Archeological and Historical Society will welcome contributions of interest on old medical instruments, old medical books, or other articles having to do with preservation of local medical history. Contributions should be mailed to Jonathan Forman, M.D., 1005 Hartman Theatre Building, Columbus.

Breakfast for Historians

On May 12, second day of the 1938 State Association Annual Meeting, there will be a complimentary breakfast at the Neil House for all physicians who are interested in medical history of Ohio. Reservations should be made with Dr. Jonathan Forman, Editor of *The Journal.*

Dr. Abell Awarded Medal

Dr. Irvin Abell, Louisville, Ky., President-Elect of the American Medical Association, has been named recipient of the Laetare Medal which the University of Notre Dame bestows annually on an outstanding Catholic layman. In announcing the winner of this year's medal, the 56th in the history of the award, Rev. John F. O'Hara, president of the university said Dr. Abell's service "has endeared him in the esteem of a numerous and extensive public benefited by his years of devotion to the complete welfare of his fellow men."

Pathologists Meet in Cleveland

Members of the Ohio Society of Clinical and Laboratory Diagnosis were the guests of Dr. Howard T. Karsner and local pathologists at a meeting April 16, at the Institute of Pathology of Western Reserve University, Cleveland. The program included the following addresses: "Method of Estrin Determination", by Dr. Anna May Young; "Exact Photographic Medical Illustration", by Mr. R. Stevenson; "Ratio of Urea to Non-protein Nitrogen in Nitrogen Retention", by Dr. R. Dominguez; "National Evaluation of Flocculation Tests for Syphilis", by Dr. B. S. Kline; "Chemical Determinations for Alcoholic Intoxication", by Dr. R. K. Straus, and "Occlusion of Coronary Artery by Intramural Hemorrhage", by Dr. W. B. Waterman. In addition, there were demonstrations of interesting gross specimens and microscopic preparation of tissues. Officers of the society are Dr. F. C. Potter, Akron, president, and Dr. A. H. Schade, Toledo, secretary.

PROCEEDINGS OF THE COUNCIL

Preparations for Participation in A.M.A. Study on Medical Care Made At April 10 Meeting; Annual Meeting Program Approved; Policy on Medical Program for Dependent Children Adopted.

A MEETING of The Council of the Ohio State Medical Association was held at the State Headquarters Office, Sunday, April 10, with the following present: President Alcorn, President-Elect Hein, Past-President Huston, Treasurer Beer; Councilors Smith, Hogue, Klotz, Skipp, Kirkland and Sherburne; Dr. Forman, Editor of *The Journal;* Dr. Platter, member of the Committee on Public Relations and Economics; Executive Secretary Nelson and Assistant Executive Secretary Saville.

On **motion** by Dr. Huston, seconded by Dr. Sherburne and **carried**, the minutes of The Council meeting, held on February 6 and published in the March, 1938, issue of *The Journal*, were approved as published.

It was announced that the membership of the State Association as of April 9, 1938, was 5,637 compared to 5,449 on the same date a year ago and to 5,945 as of December 31, 1937.

REPORTS OF COUNCILORS

First District—Dr. Smith submitted a report on the recent meeting of the First District Society at Hamilton, Ohio, and referred to the article in *The Journal* for detailed information.

Second District—A report on the recent meeting of the Second District Society at Dayton was presented by Dr. Hogue.

Third District—Dr. Klotz stated that he had attended, with Executive Secretary Nelson, a meeting of the Logan County Medical Society at Bellefontaine at which a conference was held with officials of the Farm Security Administration.

Sixth District—A report on the Sixth District meeting at Youngstown was presented by Dr. Skipp. Also, he reported on visits to the following county medical societies: Summit, Wayne, Stark, Richland and Portage.

Seventh District—It was reported by Dr. Kirkland that he had attended a recent meeting of the Tuscarawas County Medical Society.

Tenth District—Dr. Sherburne reported that he had visited all societies in his district since the first of the year, and had sent letters to delegates from counties in his district urging attendance at the Annual Meeting in May.

1938 ANNUAL MEETING

Dr. Sherburne presented a detailed review of the Annual Meeting Program and arrangements, as published in the April issue of *The Journal.* On **motion** by Dr. Huston, seconded by Dr. Klotz and **carried**, the program, as published, was approved.

REPORT OF JUDICIAL COMMITTEE

Dr. Hein presented a report of the Judicial Committee, of which he is chairman. He announced that the Judicial Council of the American Medical Association had informed the State Medical Association that the Judicial Council has overruled the appeal of Dr. R. A. Matthews, Barberton, with respect to a disciplinary action.

Erie County Amendments—The following report of the committee with respect to proposed amendments to the by-laws of the Erie County Medical Society, which have been adopted by that society and referred to The Council for final approval, was presented and on **motion** by Dr. Huston, seconded by Dr. Skipp and **carried**, the recommendations of the committee were agreed to:

"The Judicial Committee has reviewed carefully a series of amendments to the constitution and by-laws of the Erie County Medical Society, which have been approved by that society and have been submitted for final approval by The Council.

"The committee finds that none of the proposed amendments conflicts with any provisions of the Constitution and By-Laws of the State Association, dealing for the most part with local procedure. Inasmuch as the committee finds nothing objectionable in the proposed changes, it recommends to The Council that the amendments submitted by the Erie County Medical Society on March 2, 1938, and March 28, 1938, be approved by The Council and that proper notice of this action be transmitted to the secretary of the Erie County Medical Society."

A.M.A. STUDY OF MEDICAL CARE

The following report from the Committee on Public Relations and Economics was presented and, on **motion** by Dr. Huston, seconded by Dr. Klotz and **carried**, the report and recommendations were unanimously approved:

"At a meeting of the Committee on Public Relations and Economics on March 27, 1938, Columbus, careful consideration was given to the proposed study of medical care by state and county medical societies, sponsored by the American Medical Association. Various instruction blanks, forms and correspondence were read and discussed. The following actions were taken:

"(a) On **motion** by Dr. Schriver, seconded by Dr. Huston and **carried**, the committee approved the survey as proposed by the American Medical Association and recommended that The Council approve the study and pledge the active support and cooperation of the Ohio State Medical Association.

"(b) On **motion** by Dr. Platter, seconded by Dr. Lowe and **carried**, the committee recommended

to The Council that The Council approve the following procedure for the conduct of the survey.: Each member of The Council shall be responsible for seeing that the survey is carried out in the counties in his respective district and that, at the earliest possible date, each Councilor contact the proper officers of each county in his district on this question through a meeting of such officers at a central place within the district, or through correspondence if such is deemed feasible, for the purpose of informing the county society officers of the purpose of the survey and procedure, and to work out with them practical methods of conducting the study."

A general discussion was held with respect to procedure, etc., and each Councilor indicated a desire to hold a conference, as recommended by the committee, within his district at the earliest possible date so that the survey could be started in Ohio.

PROPOSED RETIREMENT FUND

On **motion** by Dr. Sherburne, seconded by Dr. Hogue and **carried**, the following report and recommendations of the Committee on Public Relations and Economics, with respect to the establishment of a retirement fund for members of the Ohio State Medical Association, were approved:

"A proposal that the Ohio State Medical Association consider the possibilities of establishing a physicians' retirement fund, submitted by The Council to the committee for study and investigation, was thoroughly discussed at a meeting of the Committee on Public Relations and Economics on March 27, 1938. On **motion** by Dr. Schriver, seconded by Dr. Houser and **carried**, the following action was taken:

> " 'It is the sense of the committee that it does not look with favor on the establishment of any retirement plan for members of the Ohio State Medical Association.'

"The above action was based on the following points raised by members of the committee during the discussion:

"(a) Provision of assistance for needy physicians is not a function of the Association. Each physician can provide an old-age annuity through private insurance or through voluntary participation in the old-age benefits section of the Federal Social Security Act; also, destitute physicians would be eligible for old-age pensions at age 65 on the same basis as other citizens.

"(b) Medical organization at present is confronted with many definite, vital problems of direct importance to members individually and the profession as a whole, and the time, money and efforts of the Association should be centered on such problems and not on activities of this kind.

"(c) Informal opinions secured from officials of the State Department of Insurance indicate that a retirement plan, to be absolutely sound and properly administered, would have to be carried on through a corporation capitalized for at least $100,000 and with a $50,000 reserve. Also, it was pointed out by officials of the State Division of Insurance that private insurance companies are encountering considerable difficulty with annuity contracts and that many mutual benefit programs have proved unsuccessful and bad investments for participating members.

"(d) It is doubtful if adequate reserves, on a sound actuarial basis, could be accumulated in any plan where payments would be made only by participating members on a voluntary basis. It was pointed out that most of the retirement plans now in effect provide that the employer or sponsoring organization shall contribute to the insurance fund, and that such a plan would not be feasible because of the limited resources of the Ohio State Medical Association.

"(e) Establishment of a retirement fund would entail a full-time office setup and, in all probability, an organization which could not be satisfactorily financed either by the retirement fund or the State Association.

"(f) An extensive investigation of such a project would require the expenditure of considerable money on the part of the State Association as actuarial and insurance counsel would have to be employed.

"(g) There is no assurance that younger members of the profession would desire to participate in such a plan inasmuch as the retirement benefits would have to be quite nominal and this would mean that eventually the plan would deteriorate to such a point that it would have to be dissolved with possible loss to those participating."

REPORT OF COMMITTEE ON PUBLIC RELATIONS AND ECONOMICS ON MISCELLANEOUS QUESTIONS

The following report of the Committee on Public Relations and Economics was presented and, on **motion** by Dr. Sherburne, seconded by Dr. Beer and **carried**, was approved:

"This report on miscellaneous business transacted by the Committee on Public Relations and Economics on March 27, 1938, at a meeting in Columbus, is submitted for consideration and action by The Council.

Aid to Dependent Children

"Correspondence from county medical societies with respect to the proposed Medical Program for Dependent Children and replies received on the questionnaire, sent to county medical societies recently from the State Headquarters Office, were read and discussed. One of the most difficult problems confronting the county societies is the question of fees and compensation. The suggestion made by officers of a few county societies that a state-wide fee schedule for services to dependent children be established was discussed by the committee. Following such discussion action was taken by the committee as follows:

"On **motion** by Dr. Lowe, seconded by Dr. Platter and **carried**, the committee reaffirmed its previous action recommending that each county medical society work out its own fee schedule with the local ADC administrator or board, and that the fees charged by physicians in private practice in a county shall be used as a basis for negotiations.

"It was the sense of the committee that a state-wide fee schedule for this work would not be feasible and would result in many inequalities and injustices.

"The Executive Secretary was instructed to disseminate definite information on what has been and is being done in each county in this program among the various county societies.

Certification Blank

"The committee considered a suggested certification of disability form submitted by the Bureau of Aid to Dependent Children. On **motion**

by Dr. Huston, seconded by Dr. Lowe and carried, the form was amended to read as follows:

DIVISION OF PUBLIC ASSISTANCE
Certification of Disability

Having given the necessary examinations to determine the ability of _____ _____to perform the duties, and assume the responsibility of providing adequate care for h____ children, I hereby certify that, in my opinion, the above mentioned adult is (Partially) (Totally) incapacitated. Date _____, 193___

Signed:
Dr. _____

Approved by Professional
Advisory Committee.
Chairman:
_____

"A communication from the State Minimum Wage Division, referred to the committee by The Council, and requesting the State Medical Association to suggest the name of a Columbus physician who might serve on an advisory committee to that Division, was discussed. The committee instructed the President to submit the names of three Columbus physicians, who might be willing to serve on such a committee, to The Council, from which list The Council might select the name of one for submission to the Division.

Re: Group Insurance

"Several proposals from representatives of health and accident insurance companies, requesting the State Medical Association to consider the possibility of sponsoring some type of health and accident insurance for all members on a voluntary basis, were considered. After careful study the committee, on **motion** by Dr. Lowe, seconded by Dr. Huston and **carried**, expressed themselves as believing that a group health and accident insurance program for members is not advisable at this time, and that such recommendation be transmitted to The Council.

"A communication and resolution, received by the State Association from the Westchester County, New York, Medical Society, were read. On **motion** by Dr. Platter, seconded by Dr. Schriver and **carried**, the communications were ordered filed for future reference. Members of the committee pointed out that the principles enumerated in the resolution were similar to those already stated by the Ohio State Medical Association, and that the proposed study by the A.M.A. and the constituent state associations would accomplish many of the suggestions found in the Westchester County proposal.

"Dr. Lowe submitted a report on the meeting of the Sub-Committee on Workmen's Compensation, held on Saturday, March 26. The report as submitted was approved by the committee on **motion** by Dr. Schriver, seconded by Dr. Huston and **carried**, and ordered referred to The Council for consideration and action.

"There was a general discussion on developments at Washington with respect to the present status of Group Health Association, Inc.; H.R. 9687, introduced by Congressman May; the Reorganization Bill, etc. Replies from Ohio Congressmen to communications sent to them by the Ohio State Medical Association were read and discussed.

"After a general, informal discussion of various questions such as the proposed sales tax referendum, coming political campaigns, proposed antenuptial physical examination bill, etc., the committee adjourned to meet at the call of the chairman."

In compliance with the approved recommendation relative to appointment of a physician on the Advisory Committee to the State Minimum Wage Division, Dr. Alcorn appointed Dr. Drew L. Davies of Columbus, and such appointment was confirmed by The Council.

WORKMEN'S COMPENSATION REPORT

A report on a meeting of the Sub-Committee on Workmen's Compensation, held in Columbus on Saturday, March 26, was submitted. On **motion** by Dr. Huston, seconded by Dr. Smith and **carried**, the report and recommendations of the subcommittee, as amended, were approved and ordered filed.

MISCELLANEOUS BUSINESS

Unemployment Compensation Fund—On **motion** by Dr. Hein, seconded by Dr. Sherburne and **carried**, The Council by formal action approved the mail poll of Councilors taken sometime ago authorizing compliance by the State Association with the order of the State Unemployment Compensation Commission holding the State Association liable for the payment of unemployment compensation premiums on employes of the Association.

Amendment of Articles of Incorporation—On **motion** by Dr. Sherburne, seconded by Dr. Klotz and **carried**, The Council voted to submit to the House of Delegates suggested changes in the Articles of Incorporation of the State Association, on file with the Secretary of State, for formal action by the House of Delegates.

Postgraduate Lectures—The Executive Secretary reported an unusual amount of interest in and splendid attendance at the series of postgraduate lectures being given in Region B at Chillicothe, Ohio. The total attendance for the first five sessions was 720, an average attendance per session of 144.

Special Train—It was reported that 80 persons have made reservations on the Ohio State Medical Association Special Train to San Francisco in June and that good accommodations still are available.

Resolution on Death of Dr. DeWitt—On **motion** by Dr. Smith, seconded by Dr. Hogue and **carried**, the following resolution relative to the death of Dr. John P. DeWitt of Canton, was adopted by The Council:

Whereas, The Council of the Ohio State Medical Association has learned with deep regret of the untimely death of John P. DeWitt, M.D., Canton, Ohio, and

Whereas, Dr. DeWitt had for many years been official delegate from Ohio to the American Medical Association and official delegate from the Stark County Medical Society to the Ohio State Medical Association, and

Whereas, He always had been most active in furthering the work and activities of medical

organization, supporting all programs designed to advance scientific medicine and improve public health, and promoting enterprises to create good fellowship and goodwill among his fellow practitioners of medicine, and

Whereas, The death of Dr. DeWitt removes from the ranks of the medical profession one sincerely loved by his colleagues and held in high esteem by members of the laity; and whose enthusiastic efforts to enhance the standards and reputation of the medical profession will be greatly missed,

Be It Resolved, That The Council of the Ohio State Medical Association through the adoption of this resolution expresses sincere appreciation for the meritorious services rendered his profession and organized medicine by the late Dr. DeWitt and extends to his family and loved ones a message of sympathy from those who had the honor and privilege of knowing him and working with him.

Pro Rata Dues—On motion by Dr. Klotz, seconded by Dr. Sherburne and carried, the Executive Secretary was instructed to collect dues of new members as follows for the periods indicated: July 1 to September 30—$3.00; October 1 to December 31—$2.00.

P.T.A. Conference—Dr. Alcorn reported on an informal conference held by him and the Executive Secretary with officials of the Ohio Congress of Parents and Teachers with respect to policies and procedure in connection with the Summer Round-up of Children, one of the major health projects of parent-teacher groups. The President stated that he had informed such officials that they could depend upon the active cooperation of the State Medical Association on this and other matters.

There being no further business, The Council adjourned to meet in Columbus, Ohio, on the evening of May 10, 1938, the day preceding the opening of the 92nd Annual Meeting.

Attest: CHARLES S. NELSON,
Executive Secretary.

Staff at Orphans' Home Elects

Dr. Ben R. McClellan, Xenia, was re-elected dean of the volunteer consulting medical staff of the Ohio Soldiers' and Sailors' Orphans' Home, at the annual meeting of the staff, Wednesday, April 6, at Xenia. Dr. H. C. Messenger, Xenia, was elected staff secretary, succeeding his father, the late Dr. A. C. Messenger, who held the position for many years.

Members of the staff joined physicians of Greene County and eight surrounding counties in a pediatric refresher course, sponsored by the Bureau of Child Hygiene, State Department of Health. Addresses were made during the afternoon and evening by Dr. A. Graeme Mitchell and Dr. Robert A. Lyon, of the Department of Pediatrics, University of Cincinnati College of Medicine.

Disciplinary Action Taken By State Medical Board on April 5

Mid-summer examinations of the State Medical Board will be held at Columbus, May 31, June 1, 2 and 3, the board decided at its meeting in Columbus, April 5.

Included among the business transacted by the board, were several cases of disciplinary action.

The license of Dr. W. E. Leever, Cincinnati, to practice medicine and surgery, was suspended for one year for violation of the Harrison Narcotic Act.

Convicted of criminal abortion, the license of Dr. Mounce E. Byrd, Burbank, to practice medicine and surgery was suspended for the period of his incarceration. Following his release, he will be given an opportunity to show cause why his license should be restored.

Dr. R. O. Buck, osteopath, Wauseon, was suspended from the practice of osteopathy and surgery for six months, on the charge of repeated prescribing of remedies which can neither be classified as anesthetics or antiseptics and may only be used by practitioners of medicine. The case has been appealed to the Court of Common Pleas of Fulton County. The license of Dr. Charles A. Kruse, osteopath, Sidney, was suspended for three months for the same reason. Appeal has been taken to the Court of Common Pleas of Franklin County.

The certificate of Philip Margolin, Dayton, chiropodist, convicted of a felony and now on probation, was suspended for the period of his probation, following which he will be given an opportunity to show cause why his certificate should be restored.

Licenses to practice medicine and surgery in Ohio were granted by the board through reciprocity to the following:

Sol Asch, Portsmouth, Long Island College of Medicine; Anthony H. Dindia, Cleveland, St. Louis University; George G. Durst, Cincinnati, Medical College State of South Carolina; William H. Gault, Cincinnati, Yale University; William H. Jacobson, Canton, Washington University; Joseph P. Keogh, Youngstown, University Colorado Medical School; Raymond V. Kuhn, Akron, University of Wisconsin; Lewis B. McCullough, Mansfield, Creighton University.

Anthony G. Palmieri, Cleveland, St. Louis University; Fitz-Melvin C. Payne, Cleveland, Maharry Medical College; Max T. Schnitker, Toledo, University of Michigan; Oliver E. Todd, Toledo, University of Michigan; Edw. A. Wallace, Cincinnati, University of Chicago; Thornton L. Waylan, Bellevue, University of Kansas; Milton Wolpert, East Liverpool, Rush Medical College; Francis M. Woods, Cincinnati, Yale University; William N. Cain, Edgerton, University of Louisville; Charles I. Thomas, Shaker Heights, Western Reserve University School of Medicine.

SPECIAL SESSION OF LEGISLATURE TO MEET RELIEF CRISIS REQUESTED BY CITY OFFICIALS; PROGRAM PROPOSED

DESCRIBING the need for relief in several Ohio cities as "desperate", officials of the Ohio League of Municipalities have asked Governor Davey to call the Legislature into special session immediately to consider the problem.

According to State Auditor Joseph T. Ferguson, the total case load on direct relief in Ohio for March was 141,871, for which the total expenditure was $2,674,191.17. It was reported that 21 counties in the first three months of this year spent $6,772,000 out of $11,576,000 allotted them at the recent session of the Legislature. Therefore, only $4,803,000 remained for their use during the remaining nine months of 1938. Deficiency of necessary revenue for poor relief in the entire state for the rest of 1938 was estimated at $17,000,000. Cleveland municipal officials declared that approximately one-third of that city's population was on relief or W.P.A.

THESE COUNTIES DESPERATE

Dates on which relief funds will be exhausted in various cities and counties was estimated by municipal and county officials as follows:

Cleveland—Relief funds run out April 15. Expected relief deficit $6,500,000.

Toledo—Relief funds already exhausted. Expected deficit $2,100,000.

Cincinnati and Hamilton County—Funds run out Sept. 1. Expected deficit $1,000,000.

Columbus—Funds run out May 1. Expected deficit $800,000.

Dayton—Funds exhausted May 1. Expected deficit $885,000.

Akron—Funds exhausted June 15. Expected deficit $500,000.

Canton and Stark County—Funds run out June 1. Expected deficit $720,000.

Warren and Trumbull County—Funds exhausted April 5. Expected deficit $541,000.

Springfield—Funds run out Sept. 1. Expected deficit $57,000.

Barberton—Funds exhausted July 1. Expected deficit $40,000.

Lorain—Funds exhausted June 1. Expected deficit $100,000.

East Cleveland—Funds run out Aug. 1. Expected deficit $50,000.

Euclid—Funds run out June 1. Expected deficit $32,000.

Lakewood—Funds run out Oct. 1. Expected deficit $25,000.

PROPOSED PROGRAM

Included in the relief program proposed by the cities and counties are the following points:

The state should raise at least half of the money required for unemployment relief.

The state contribution to relief should be apportioned on the basis of need and by a state commission.

Cities and counties should be enabled to raise their share of relief expenditures by levying any taxes which the state has levied or may levy.

The Annat Act should be restored to its original form so that tax warrants may apply to county and school taxes as well as to city taxes.

The majority required to approve special levies should be reduced from 65 per cent to a simple majority; such levies should be for one to five years; the taxing subdivision should be able to borrow up to 70 per cent in anticipation of collection of such levies.

Cities and counties should be able to submit bond issues to finance their share of WPA projects and only a simple majority should be necessary for approval of such bonds.

Local governments should be authorized to fund relief deficits incurred prior to and in 1938.

BE SURE TO GET THERE EARLY

In making plans for attending the Annual Meeting at the Neil House, Columbus, Wednesday and Thursday, May 11 and 12, remember that the First General Session begins at 10:30 o'clock, Wednesday morning. Arrange your trip to be in Columbus early enough to attend this opening session. The program, one of the outstanding during the meeting, includes Dr. Fred Wise, New York dermatologist, as guest speaker.

"Birth of a Baby" Gets Ohio O.K.

"The Birth of a Baby", the film prepared by the American Committee on Maternal Welfare, has been approved for public showing by the Division of Film Censorship of the Ohio Department of Education. Sponsored by the American Medical Association, the United States Public Health Service, American College of Surgeons, the American Gynecological Society, etc., the film was shown at the Mid-Year Organization Conference of the Ohio State Medical Association last October, and approved by The Council for presentation before lay groups, at its meeting November 21, 1937.

Dr. Humphrey Reappointed

Dr. Lee Humphrey, Malta, who has served on the State Medical Board with distinction for 28 years, was recently appointed to the Board for another seven-year term by Governor Davey.

Will You Do Your Part?

Appeal for Help, in Making Study of Medical Care a Success, to Every Ohio Physician from The Council, Ohio State Medical Association

Doctor:

Your active, personal assistance in carrying out successfully one of the most important undertakings ever initiated by the medical profession is solicited.

You (as well as every physician in the United States) are being asked at this time **to participate in a nation-wide study of medical care,** sponsored by the American Medical Association in cooperation with all state medical associations and all county medical societies, including the Ohio State Medical Association and your county medical society or academy of medicine.

This is how you can help and what we hope you will do: When you receive from the secretary or a committee of your county medical society an American Medical Association survey blank, requesting essential information, fill out the blank as accurately and completely as possible and return it as soon as possible to the person or committee from whom you received it. No signature will be required. If possible, answer each question.

This is the one important thing we are asking you as an individual physician to do. Your responsibility in this undertaking is of primary importance. Your participation is absolutely essential. You are not being given a difficult assignment or one which will require you to expend much time and effort. However, **unless you do your part the whole plan may fail.**

The **purposes** of this study by the A. M. A. and its constituent and component societies are: (1) To determine the prevailing need for medical and preventive medical services. (2) To develop preferable procedure for supplying these needs.

This survey will be made by the medical profession. Data will be analyzed by experts within and employed by the medical profession. It will be a fact-finding study. Its motives are entirely constructive. Armed with the valuable information which will be obtained, if you and all other physicians cooperate, the medical profession will be able to speak more authoritatively on the medical needs of the people of this country and will be able to develop a constructive program or programs of meeting needs when known and supported by facts.

The part which you as an individual physician will be expected to take will be but one phase of the study, but a vital one. Officers or a committee of your county medical society in cooperation with officers and committees of the State Association will guide and direct the collection of additional data from hospitals, welfare agencies, governmental agencies, dentists, nurses, etc.

Here is an opportunity for you to help yourself, your profession and the public. Your cooperation is necessary to make the whole project a success. We earnestly request your active and prompt help. May we count on you?

THE COUNCIL,
Ohio State Medical Association.

PARENT-TEACHER GROUPS NEED ASSISTANCE AND GUIDANCE OF MEDICAL SOCIETIES ON SUMMER ROUND-UP PROGRAM

ONE of the timely questions requiring the attention and active assistance of medical organization and individual physicians is the movement known as the Summer Round-Up of the Children, sponsored on a nation-wide basis by the parent-teacher groups of the country.

Because this medical and health program will be carried on in Ohio during the next month or two by parent-teacher organizations in practically every city, town and village in the state and because this movement needs the active guidance and help of medical societies and all physicians, *The Journal* takes this opportunity to present information and suggestions on the subject of summer round-ups.

Little need be said concerning the history of the Summer Round-Up of the Children movement, except that it has become the major health project of the National Congress of Parents and Teachers, representing local groups in almost every school district of the country.

MEDICAL ORGANIZATION HAS HELPED

Since 1930, the American Medical Association has been officially represented on a committee of the parent-teacher congress concerned with the summer round-up program. Because medical organization has taken an active interest in this program, many weaknesses and flaws in the earlier methods used in conducting the round-ups have been eliminated. For the most part there is harmonious cooperation between parent-teacher groups and the medical profession. However, this is not always the case, either because of failure of officials of parent-teacher organizations to consult with and obtain the advice of the medical profession or because medical societies and physicians have neglected to advise and assist upon request.

There have been no serious misunderstandings in Ohio. Nevertheless, this does not necessarily mean that the relationship between parent-teacher groups and the medical profession cannot be improved.

Realizing the value and importance of active cooperation and mutual understanding between parent-teacher organizations and medical organization, The Council of the Ohio State Medical Association as recently as February 6, 1938, adopted a resolution urging all component county medical societies to name special committees to work with and assist local parent-teacher organizations as well as public school officials. A bulletin reviewing the action of The Council was sent to all county medical societies' officers on March 21, 1938. Some county medical societies have adopted this suggestion—in fact some have been actively assisting such groups for years.

NOW IS THE TIME TO ACT

The Journal recommends that all county medical societies give this matter prompt attention. Plans for conducting the summer round-ups are being formulated at this time. Those planning the round-ups need and should have the advice and guidance of the medical profession, not only on medical aspects but on policies and procedure as well. Conferences which have been held recently by officers of the State Medical Association and Ohio Congress of Parents and Teachers reveal that officials of the parent-teacher groups welcome the help of medical organization—national, state and local. The assistance of the State Medical Association has been offered but to make such assistance of practical value county medical societies and individual physicians must take an active interest in this question. Now is the time for each county medical society to act. Now is the time for each county medical society to confer with representatives of local parent-teacher organizations, discuss the summer round-up program and other medical and public health questions, and endeavor to work out a local program which will be mutually agreeable and at the same time of value to pre-school children.

For the information of members of the Ohio State Medical Association the following statement of purposes relating to the summer round-ups and containing other pertinent information, adopted by the National Congress of Parents and Teachers following conferences with officials of the American Medical Association, is published.

PRESENT PURPOSES AND POLICIES OF THE SUMMER ROUND-UP

"The Summer Round-Up of the Children is the major health project of the National Congress of Parents and Teachers and its object is to send children to the entering grades of school or kindergarten in good physical and mental condition. The Round-Up chairman should seek cooperation in planning from local medical and dental societies and public health organizations.

"The objectives of the project include examination in the spring of all children who will enter school for the first time in the fall, correction of all remediable defects during the summer and a check-up in the fall to determine the condition of the children and the results of the project. More children are entering school every year as free as possible from defects and protected against disease as a result of this project.

"When the Summer Round-Up was first begun in 1925, the examinations were practically all

made in groups, as it was believed that the stimulus of the groups was needed at that time. The present policy, however, of the National Congress of Parents and Teachers is to advise parents wherever possible to take their children to their family physician and dentist for examination and treatment. Where this is not possible, group examinations arranged by the local unit are still advised. Where group examinations are made, however, the children are referred to physicians and dentists of the family's own choice for necessary corrections.

"While this project concerns itself primarily with the children of the entering grades of school,

Evidence of the willingness of parent-teacher groups to work with the medical profession is found in the following excerpt from a pamphlet just issued by the National Congress of Parents and Teachers regarding the 1938 summer round-up program:

"Every effort is made to further a closer relationship between parents and the family physician and dentist. Whenever possible, examinations and treatment at the office of the family physician and dentist are encouraged. Plans for the conduct of the summer round-up should be worked out in consultation with representatives of the local medical and dental societies. When children come from families unable to pay for these services, such cases should be taken care of through the proper organized channels."

where the Summer Round-Up has been carried on continuously over a number of years, there has been observed an encouraging increase in interest in periodic health examinations, which should be encouraged at all ages, but especially in early childhood.

INFORMATION FOR PHYSICIANS

"In accordance with the expressed policy of the National Congress of Parents and Teachers, the present method of having children examined in group clinics is gradually being modified wherever possible and encouragement is to be given for the performance of the pre-school physical examination in the office of the family doctor, or the doctor of the patient's own choice, where no established relationship exists with any one physician. This may be accomplished in one of several ways, which should be decided upon by the County Medical Society, and in which all physicians in the community should participate in like manner, except specialists who do not work with children, or other physicians who do not choose to participate in the plan."

"More detailed information about the Summer Round-Up than is given above may be had from the local Parent-Teacher Association. It is probably advisable to have a Committee appointed by both the local Parent-Teacher Association and the local Medical Society, to settle details of the cooperative plan.

"(a) a definite hour, on a specific day of the week, the same for all physicians, might be designated for the performance of the pre-school examinations.

"(b) each physician might designate his own most suitable hour for these examinations in his own office.

"(c) physicians might agree to do these examinations at the end of, or just before, their regular office hours.

"(d) whatever time arrangements are made, physicians should agree to use the regularly designated examination blank, to fill it out completely and to cooperate in arrangements made to deliver the blanks to the Summer Round-Up Committee in the most convenient manner.

"(e) a uniform and moderate fee should be decided upon for examinations made at the specially designated hours; all examinations at other times to be made at the physician's regular office fees for that particular type of work.

"(f) it has been customary, and presumably can be arranged locally, to examine gratis those children whose parents cannot afford the examination. Local social service organizations can assist in deciding who ought to pay. In some places the local Parent-Teacher Association has arranged payments to physicians for examinations of non-pay patients on a nominal fee basis.

"(g) corrections should be advised, and should be done by the physican of the family's choice: reports of corrections should be made in the most convenient manner, depending on local circumstances.

"Group assembled 'clinics' are being discouraged by the National Congress, as having outlived their usefulness in most places. However, it is recognized that in some localities the circumstances may be such that no other plan is feasible, or the medical society may prefer that method. Under such circumstances, great care should be exercised to provide a suitable, quiet, clean and private place for making the examinations, and to allow plenty of time and plenty of help for making them. The details of such 'clinic' organization may be left to qualified public health nurses in the community, in cooperation with the local Medical Society committee.

SUMMER ROUND-UP DENTAL EXAMINATIONS

"The dental examination of Summer Round-Up children is a most important, but usually a simple procedure. Although the Round-Up is primarily and essentially a Congress of Parents and Teachers project, its success is measured by the degree

of cooperation received from the members of the health professions. Cooperation can best be secured from the local members of those professions by having them take an active part in the preparation of the Round-Up plans. Thus, the Round-Up chairman should, well in advance of the Round-Up, invite the local dental society to assist in the plans for the dental examination. In the event there is no local dental society, the local dentists should be requested to cooperate, acting as a unit. A thorough, mutual understanding of the purpose and procedure of any project is essential for its success. Therefore, a definite understanding should be had regarding the dates of the Round-Up; the type of examination; the assignment of children who have no family dentist; the examination fee to be charged those who can pay; the fee to be charged the near-indigent; the absence of a fee, when and where necessary; the plans for follow-up, and very definite plans for the correction of all defects found.

Referring to the summer round-ups and the importance of cooperation on the part of the medical profession, The Journal of the American Medical Association recently said editorially:

"This contribution to the public health has been significant not alone in the value of the physical examinations, the medical treatment and the prophylactic inoculations growing out of them but in establishing the principle that the vital factor in medical care, including preventive measures, is the family doctor."

"Dental examinations can best be made in the office of the private dentist, because the examiner has the proper equipment, instruments, lighting and hygienic facilities at hand. Also, the educational advantages offered by the examination in the office are most important. Often this is the child's introduction to the dentist. This pleasant initial experience breaks down any fear the patient may have and prepares him for future visits should correction be necessary.

"The dentists in some communities, in order to expedite matters, prefer to make the examinations in the schools. In accepting this plan, it should be understood that, generally speaking, the examinations may not be so thorough as if made in the well-equipped private dental office.

INFORMATION FOR NURSES

"The Summer Round-Up of the Children, offers opportunity for the participation of public health nurses, and their cooperation is essential to its success. The initiation for Summer Round-Up plans is undertaken by the Parent-Teacher Association. The nurse cooperates with all interested lay and medical groups.

"There are four main functions of the nurse in this program:

"I. PRELIMINARY ARRANGEMENTS
- (a) Cooperate with P.T.A. to develop plans.
- (b) Cooperate in plan for medical examination described in Section III.

"II. CASE FINDING

Nurses with the help of lay volunteers are needed to persuade families to use the Round-Up facilities. Methods are:
- (1) House to house canvass.
- (2) Lists of pre-school children supplied by doctor, nurses, schools, Sunday schools, birth registration records.
- (3) Publicity through talks, newspaper articles and posters.

"III. ASSISTANCE AT ROUND-UP CLINIC
- (1) History taking.
- (2) Assisting physician with examination and recording findings.
- (3) Discussion of health problem with mother.

"IV. HOME FOLLOW-UP

This is peculiarly the nurse's part in the Round-Up. The nurse helps parents plan for indicated care. She refers health needs of other members of the family to the family physician or other medical service, and she assists in family health teaching. Her findings and her services are recorded on the child's record.

"Volunteer Service through lay groups is valuable in—
- (a) Preliminary arrangements, finance, publicity
- (b) Case finding in cooperation with the nurse
- (c) Transporting children otherwise unable to attend
- (d) At special Round-Up, acting as hostess, weighing and measuring.

COOPERATION

"The general principles and information given above are intended to be helpful in the making of local plans for the Summer Round-Up. There can be no one National plan which will fit all local situations, but the general governing principles are the same everywhere. The National Congress of Parents and Teachers, with the advice of representatives of the American Medical Association, the American Dental Association and the National Organization for Public Health Nursing, offers these suggestions for the more satisfactory and efficient organization of Summer Round-Up examinations. Suggestions are invited from local participating groups, for consideration when revision of this information leaflet becomes desirable."

CLOSE UPS AND LOW DOWNS ON FAMOUS PEOPLE SCHEDULED FOR ENTERTAINMENT OF THOSE ATTENDING ANNUAL BANQUET ON MAY 12

C. WILLIAM DUNCAN, who will speak at the Annual Banquet of the Ohio State Medical Association, May 12, Main Ballroom, Neil House, 7:30 P.M., has been a member of the staff of the *Philadelphia Evening Public Ledger* 13 years and has spent 11 as an interviewer for his column on the editorial page.



In his address, "Close Ups of Famous People", he brings to the banquet room, as it were, many prominent people for the audience to see through his eyes. He talks of the eccentricities, personalities and opinions of such people as Huey Long, President Roosevelt, Vice President Garner, Senator Borah, Senator Vandenberg, Madame Schuman-Heink, Ruth Bryan Owen, Helen Hayes, Miriam Hopkins, Amelia Earhart, Clarence Darrow, J. Edgar Hoover, Richard Crooks, Dizzy Dean, Babe Ruth and many others. He has addressed some 500 groups in 15 states of the nation.

Mr. Duncan was born 40 years ago in Gettysburg, Pa., and is a graduate of Gettysburg College. He was a sailor during the World War, spent two and one-half years as a traveling salesman and the rest of his career in the newspaper business. He has interviewed more prominent people, daily and continuously, than any active newspaperman in the United States. His column in the *Philadelphia Evening Public Ledger* is read by 70,000 people daily, according to surveys.

A special musical program also has been arranged by the Annual Banquet Committee, composed of the following Columbus physicians: Louis N. Jentgen, chairman, George T. Harding, Russel G. Means, J. W. Wilce and Edwin J. Stedem.

Preceding Mr. Duncan's address, the incoming president, Dr. B. J. Hein, Toledo, will be introduced, as well as the new president-elect. The traditional ceremony of presentation of the Past-President's gavel will be participated in by Dr. E. M. Huston, Dayton, the Past-President, and Dr. John B. Alcorn, retiring President.

Banquet tickets will be on sale near the Registration Headquarters, Mezzanine Floor, Neil House. Members should purchase their tickets early so that the committee may make reservations for all desiring to attend the banquet. There will be no table reservations except for the wives and daughters of those seated at the speakers' table.

Do You Know - - -

During the first 11 weeks of 1938 there were 6,198 cases of smallpox reported in the United States, compared with 3,297 during the same period in 1937.

* * *

The Pennsylvania State Department of Health distributed $24,000 worth of free pneumonia serum in the recent campaign. The serum of types I and II, was sent to 191 hospitals, where 493 persons were treated. The department has arranged to keep on hand serums for types V, VII, VIII and XIV for emergency calls.

* * *

A law has been enacted in the State of New York requiring a physician attending a pregnant woman to cause to be taken a standard serologic test for syphilis prior to the birth of the child.

* * *

In accordance with a resolution adopted by Congress and approved by the President, authority is given the President to set apart the month of April of each year as Cancer Control Month, and to invite the medical profession, the press and other agencies and individuals interested in a national program for the control of cancer to unite during that month in a public dedication to such a program.

* * *

When Dr. Edward J. McCormick, Toledo, was in Chillicothe March 31 as a speaker on the Regional Postgraduate Lecture Series, he was given a testimonial dinner and presented with a leather traveling case by the local Elks' Lodge. Dr. McCormick is to be nominated Grand Exalted Ruler of the Elks at the national meeting to be held in Atlantic City in July.

* * *

May 12 has been designated National Hospital Day in commemoration of the birth of Florence Nightingale, May 12, 1820.

* * *

Ernest W. Hudson, Cleveland, known to many alumni of Western Reserve University School of Medicine during his 30 years as a research assistant at that institution, died March 16.

* * *

The staff of Akron City Hospital held a dinner February 22 in honor of physicians who have been members of the staff (active and emeritus) for 25 years. The active members are Dr. L. C. Eberhard, Dr. J. N. Weller, Dr. J. H. Weber and Dr. S. Morgenroth. The emeritus members are: Dr. D. S. Bowman, Dr. A. H. Stall, Dr. T. K. Moore, Dr. A. W. Jones, Dr. A. A. Kohler and Dr. D. M. McDonald. All were present, except Dr. Weber who was ill.

Judge Clayton W. Rose of the Franklin County Court of Domestic Relations recently ordered a new trial in the case of a man held on a paternity charge, on the ground that the jury ignored scientific evidence of a blood test when they rendered a guilty verdict.

* * *

During the year 1937 there were 239,103 injury and occupational disease claims filed with the State Industrial Commission. In 24,802 of the injury cases, or 10.4 per cent, infection of a more or less serious nature developed. This represents considerable improvement, as 12.3 per cent of the injury cases in 1936 developed infections. The figure for 1929, the peak year in accident frequency, was 15.1 per cent.

* * *

The Bulletin of the Stark County Medical Society, has recently been incorporated. Name of the corporation is "The Stark County Medical Publications, Inc." Dr. G. N. Wenger, Dr. Pauline Zinninger and Dr. R. K. Ramsayer are the incorporators. Dr. C. B. King was designated as agent.

* * *

Dr. H. T. Phillips, who has served Athens County as probate judge and state representative, recently announced his candidacy for the Republican nomination for state senator from the 9th-14th senatorial districts.

* * *

Howard Hamlin, Columbus, formerly of the faculty of Ohio State University, has been named to direct a health and anti-narcotic program in Ohio schools for the State Department of Education.

* * *

Franklin County Court of Common Pleas recently upheld the conviction in the Columbus Municipal Court of a number of unlicensed naprapaths found guilty and fined $200 each for illegal advertising in the local telephone directory.

* * *

A resolution, (H.R. 452), recently submitted to the Congress by Representative Scott, California, proposes to create a House select committee to investigate the activities of the American Medical Association, state and county medical societies, the Medical Society of the District of Columbia, and of their officers and members in connection with Group Health Association, Inc., of the District of Columbia, and in connection with other cooperative and contractual groups using the services of hospitals and physicians.

HIGH SPOTS OF THE NINETY-SECOND ANNUAL MEETING, OHIO STATE MEDICAL ASSOCIATION, WEDNESDAY AND THURSDAY, MAY 11 AND 12, NEIL HOUSE, COLUMBUS, OHIO

TUESDAY, MAY 10

GOLF—Eighteenth Annual Tournament, Ohio State Medical Golfers' Association, Scioto Country Club, 8:00 A.M.

WEDNESDAY, MAY 11

OPENING SESSION—Meeting of House of Delegates, 9:30 A.M., Main Dining Room, Lobby Floor. Business Session and Annual Address of the President, Dr. John B. Alcorn, Columbus.

FIRST GENERAL SESSION—Main Ballroom, Mezzanine Floor, 10:30 A.M. Dr. Fred Wise, New York, guest speaker. Addresses by Dr. Charles E. Kinney, Cleveland, representing Section on Eye, Ear, Nose and Throat, and Dr. Clyde L. Cummer, Cleveland, representing Section on Medicine.

PUBLIC HEALTH ROUND-TABLE LUNCHEON—Spanish Room, Deshler-Wallick Hotel, 12:15 P.M., under auspices of Section on Public Health and Preventive Medicine. Speakers: Mr. Leo F. Ey, Columbus, chief, Division of Laboratories, State Department of Health, and Dr. Warren C. Breidenbach, Dayton, member, Ohio Public Health Council.

Formal Opening of Scientific and Technical Exhibits, and the Hobby Show, 1:15 P.M.

SECOND GENERAL SESSION—Main Ballroom, Mezzanine Floor, 1:30 P.M. Special First-Aid Demonstration by Dr. Drew L. Davies, Columbus, with members of State Highway Patrol. Dr. Clara M. Davis, Winnetka, Ill., guest speaker.

SESSIONS OF THREE SCIENTIFIC SECTIONS—2:30 P.M. Section on Medicine, Main Ballroom, Mezzanine Floor; Section on Obstetrics and Gynecology, Main Dining Room, Lobby Floor; Section on Eye, Ear, Nose and Throat, Colonial Room, Mezzanine Floor.

Inspection of Scientific and Technical Exhibits, and the Hobby Show, 5:30 P.M.

THIRD GENERAL SESSION—Main Ballroom, Mezzanine Floor, 8:00 P.M. Guest speakers, Dr. Perrin H. Long, Baltimore, Md., and Dr. Irvin Abell, Louisville, Ky., President-Elect, American Medical Association.

THURSDAY, MAY 12

SESSIONS OF THREE SCIENTIFIC SECTIONS—9:00 A.M. Section on Surgery, Main Ballroom, Mezzanine Floor; Section on Pediatrics, Main Dining Room, Lobby Floor; Section on Nervous and Mental Diseases, Colonial Room, Mezzanine Floor.

Inspection of Scientific and Technical Exhibits and the Hobby Show, 12:00 Noon.

HOUSE OF DELEGATES—Luncheon and Final Session of House of Delegates, 12:00 Noon. Main Dining Room, Lobby Floor.

FOURTH GENERAL SESSION—Main Ballroom, Mezzanine Floor, 1:30 P.M. Guest speakers: Dr. Sumner L. Koch, Chicago, Ill., and Dr. Hugo Roesler, Philadelphia, Pa. Representatives of Scientific Sections: Dr. H. E. McClenahan, Youngstown, Section on Obstetrics and Gynecology; Dr. Thomas E. Jones, Cleveland, Section on Surgery; Dr. E. A. Baber, Cincinnati, Section on Nervous and Mental Diseases; Dr. John A. Toomey, Cleveland, Section on Pediatrics.

Inspection of Scientific and Technical Exhibits, and Hobby Show, 5:15 P.M.

ANNUAL BANQUET—Main Ballroom, Mezzanine Floor, 7:30 P.M. Guest speaker, C. William Duncan, columnist, Philadelphia Evening Public Ledger, "Close-Ups of Famous People".

* * *

With the exception of the Public Health Luncheon, which will be held at the Deshler-Wallick Hotel, all official functions of the Ninety-Second Annual Meeting will take place in the Neil House.

Registration Headquarters, located at the Northeast Corner of the Technical Exhibit Hall on the Mezzanine Floor, will be open daily from 8:30 A.M. to 5:30 P.M.

Scientific exhibits will be displayed in the Junior Ballroom, Mezzanine Floor, which will be open from 8:30 A.M. to 7:00 P.M. daily.

Technical Exhibit, located on the Mezzanine Floor, will be open from 8:30 A.M. to 7:00 P.M. daily.

Exhibits in the Hobby Show will be located in the Garden, Birch and Walnut Rooms, in the Southwest Corner of the Mezzanine Floor.

Demonstration and clincal lectures on the diagnosis and treatment of pneumonia by several members of the Department of Internal Medicine, University of Cincinnati, and the Cincinnati General Hospital with Dr. James Ruegsegger in charge, will be presented periodcally during the meeting, in the Red Room in the Southwest Corner of the Mezzanine Floor.

Women guests, for whom special entertainment is being arranged, should register immediately upon arrival at the registration desk provided for that purpose, adjacent to Registration Headquarters.

Admission to all sessions will be by badge only, obtainable at Registration Headquarters, upon presentation of 1938 membership card.

INTERESTING DATA ON HOSPITALS FOUND IN ANNUAL SURVEY BY A.M.A.; STATISTICS ON OHIO INSTITUTIONS REVIEWED

ACCORDING to the Seventh Annual Presentation of Hospital Data by the Council on Medical Education and Hospitals of the American Medical Association, published in full in the March 26, 1937, issue of *The Journal of the A.M.A.*, during the year 1937 there were registered 6,128 hospitals in the United States, with 1,124,548 beds, 55,566 bassinets, 932,912 births, 944,436 average census and 9,221,517 patients admitted, the largest number in the history of American hospitals.

While the number of hospitals represents a decrease of 61 from the preceding year, there was a gain of 27,827 in the number of beds and 1,341 in bassinets. The rate of growth in hospitals is equivalent to one hospital of 76 beds for each day, Sundays and holidays included

During 1937 there were 101,412 more babies born in hospitals than in 1936, and 574,632 more patients admitted. The average census was greater by 35,920.

Of the 6,128 hospitals, 1,722 are governmental, including 329, federal; 522, state; 484, county; 324, city; and 63, combined city and county. Non-profit organizations operate 2,693 hospitals, and 1,713 hospitals are in the proprietary class —owned by individuals, partnerships or incorporated for profit.

Hospitals approved for intern training total 732, and 465 are approved for residence in specialties.

The rate of occupancy in general hospitals during 1937 was 70 per cent; one person in 14 became a hospital bed patient during the year; the average length of stay in general hospitals was 12.6 days, and persons entered hospitals during the year at the rate of one every 3.4 seconds.

The average daily census of empty beds was 180,112 in 1937, 188,205 in 1936 and 199,629 in 1935. The census showed an average of 123,811 empty beds in general hospitals. Eighty-six state mental hospitals reported an average census more than 15 per cent in excess of rated capacity and seven exceeded their capacity by more than 50 per cent.

Hospitals, having their own clinical laboratories number 4,527, with 3,592 of these under the direction of a physician. According to the report, in most cases where a pathologist is not in charge, there are competent technicians, with physicians making the diagnosis.

X-ray departments are operated by 4,894 hospitals, with radiologists in charge of this service in 4,123 hospitals.

STATISTICS ON OHIO HOSPITALS

Hospitals, sanatoriums and related institutions in Ohio registered and approved during 1937, numbered 250, two less than last year. Hospital facilities of the state according to control are: Federal, 6; state, 23; county, 21; city, 23; church, 43; fraternal, 4; other non-profit corporations and associations, 87; individual and partnership, 22; profit corporations, 21.

Ohio hospitals are classified as to types of service as follows: general, 151; nervous and mental, 28; tuberculosis, 21; maternity, 10; industrial, 2; eye, ear, nose and throat, 2; children's, 3; orthopedic, 2; isolation, 2; convalescent, 5; hospital departments of institutions, 20, and all other hospitals, 4.

The Council on Medical Education and Hospitals refused registration to 29 Ohio hospitals, with a bed capacity of 755, during 1937. Commenting on this point, the report states, "There are 617 institutions (in the United States), which, because of alleged unethical or questionable practices, admission to their staffs of members who are seriously unqualified either morally or professionally, flagrant methods of advertising or for other valid reasons, are deemed unworthy of being included."

Bed capacity of registered hospitals in Ohio during 1937 was 53,851, and 2,542 bassinets, compared with 53,361 and 2,553 in 1936. Patients admitted increased from 399,930 in 1936 to 440,600 in 1937. The average census last year was 46,154 compared with 44,927 in 1936. The percentage of beds occupied in general hospitals in Ohio increased from 67 in 1936 to 73.1 in 1937. Ohio hospitals reported 51,036 births in 1937, compared with 43,964 the previous year.

Hospitals in process of development in Ohio include five opened during 1937, on which registration is pending; two, under construction, and four being planned.

Pathology departments were reported by 186 Ohio hospitals, of which 150 are under the direction of physicians. X-ray departments are directed by physicians in 165 of the 192 hospitals in Ohio having such departments in 1937. Apparatus for roentgenography is reported in 146 hospitals; for fluoroscopy in 164, and for roentgenotherapy in 81.

APPROVED FOR INTERNS; RESIDENCIES

The following Ohio hosiptals, numbering 41, are approved for internship: City, Peoples and St. Thomas Hospitals, Akron; Aultman and Mercy Hospitals, Canton; Bethesda, Christ, Cincinnati General, Deaconess, Good Samaritan, Jewish and St. Mary Hospitals, Cincinnati; City, Fairview Park, Lutheran, Mt. Sinai, St. Alexis, St. John's; St. Luke's, St. Vincent, Woman's and University Hospitals, Cleveland; Grant, Mt. Carmel, St. Francis, Starling Loving University and

White Cross Hospitals, Columbus; Huron Road Hospital, East Cleveland; Good Samaritan, Miami Valley and St. Elizabeth Hospitals, Dayton; Mercy Hospital, Hamilton; City Hospital, Springfield; Flower, Lucas County, Mercy, St. Vincent's, Toledo, and Woman's and Children's Hospitals, Toledo; Youngstown and St. Elizabeth's Hospitals, Youngstown.

Hospitals in Ohio approved for residencies in specialties number 28. They are: Children's, City and St. Thomas Hospitals, Akron; Mercy Hospital, Canton; Children's, Cincinnati General, Deaconess, Good Samaritan, Hamilton County Tuberculosis, Jewish, Longview State Hospitals, Cincinnati; Cleveland State Hospital, City, Mt. Sinai, St. Alexis, St. Ann's Maternity, St. John's, St. Luke's, and University Hospitals, Cleveland; Children's and Starling Loving University Hospitals, Columbus; Good Samaritan and Miami Valley Hospitals, Dayton; Huron Road Hospital, East Cleveland; Toledo State Hospital, Toledo; Cleveland Tuberculosis Sanatorium, Warrensville; Harding Sanitarium, Worthington, and St. Elizabeth's Hospital, Youngstown.

Ohio schools for clinical laboratory technicians approved by the Council are: Institute of Pathology, Western Reserve University, (University Hospitals), Cleveland; Mt. Sinai Hospital, Cleveland; Starling Loving University Hospital and White Cross Hospital, Columbus; Huron Road Hospital, East Cleveland; College of Mount St. Joseph-on-the-Ohio, Mount St. Joseph, and Youngstown Hospital, Youngstown.

Ohio Hospital Association Meets

Dr. Harry L. Rockwood, Mt. Sinai Hospital, Cleveland, was named president-elect of the Ohio Hospital Association, at the closing session of the association's annual meeting held in Columbus, April 5-7. Dr. Fred G. Carter, Christ Hospital, Cincinnati, was installed as president. Other officers elected include Miss Nell Robinson, City Hospital, East Liverpool, first vice-president; Sister M. Miriam, Mercy Hospital, Toledo, second vice-president, and Msgr. M. F. Griffin, Cleveland, treasurer. Dr. Carter and Guy Clark, secretary of the Cleveland Hospital Council, were named delegates to the American Hospital Association convention in Dallas, Texas, next September.

New Order Relative to Hernia

An order to the effect that no treatment of hernia by the injection method is authorized and that such treatment will not be paid for was recently issued by the United States Employees' Compensation Commission. This Commission is in charge of compensation and payment for medical services rendered to injured W.P.A. workmen.

A.M.A. HOTEL RESERVATIONS

Physicians who are planning to attend the A.M.A. Annual Meeting at San Francisco, June 13 to 17, should reserve hotel accommodations immediately. A list of hotels with room rates appears on page 48 of the advertising section of the April 9, issue of the Journal of the A.M.A. Applications for hotel reservations should be addressed to Dr. F. C. Warnshuis, chairman of the Sub-Committee on Hotels of the Local Committee on Arrangements, 450 Sutter St., San Francisco.

Fine Program Given at Well-Attended Second District Meeting

One hundred and sixty physicians attended the Second Councilor District Meeting of the Ohio State Medical Association, at Dayton State Hospital, Wednesday, March 30. Considering the inclement weather, this was a good attendance.

The well-rounded program presented brought many favorable comments. Speakers were: Dr. C. L. Straith, Detroit; Dr. P. B. Bland, Philadelphia, and Dr. G. S. Shibley, Cleveland.

Dr. Straith gave two most interesting talks on "Crossroad Surgery", and "Plastic Surgery of the Head and Face". The latter was illustrated by lantern slides. Dr. Bland's first address at 11:00 A.M. was "Prevention of Uterine Cancer". At 3:00 P. M., he gave a very pratcical discussion of "Obstetric Hemorrhage, Its Significance and Management". Dr. Shibley's topic was "The Diagnosis and Treatment of Pneumonia". In two addresses he covered this subject in a splendid manner and gave many practical hints as to treatments, and also gave the results of the latest research in the administration of pneumonic serums.

During the luncheon, short talks on organization matters were made by Dr. John B. Alcorn, President, and Charles S. Nelson, Executive Secretary, of the Ohio State Medical Association.

Officers elected for the ensuing year were: Dr. Harold C. Messenger, Xenia, president; Dr. H. R. Huston, Dayton, secretary, and Dr. H. C. Hanning, Dayton, treasurer.

The program was arranged by Dr. D. W. Hogue, Springfield, Second District Councilor, and Dr. G. A. Woodhouse, Pleasant Hill, retiring president of the District Society.

COMING MEETINGS

Ohio State Medical Association, Columbus, May 11-12.

American Medical Association, San Francisco, June 13-17.

American Association of Genito-Urinary Surgeons, Atlantic City, May 2-4.

American Association of Industrial Physicians and Surgeons, Chicago, June 6-9.

American Association of Pathologists and Bacteriologists, Atlantic City, May 3-4.

American Association of the History of Medicine, Atlantic City, May 2.

American College of Surgeons, New York, Oct. 17-21.

American Gastro-Enterological Association, Atlantic City, May 2-3.

American Laryngological Association, Atlantic City, May 2-4.

American Neurological Association, Atlantic City, May 2-6.

American Orthopedic Association, Atlantic City, May 3-5.

American Public Health Association, Kansas City, Oct. 25-28.

American Society for Clinical Investigation, Atlantic City, May 2.

American Surgical Association, Atlantic City, May 2-4.

Association of American Physicians, Atlantic City, May 3-5.

Association of Military Surgeons of the United States, Rochester, Minn., Oct. 13-15.

Congress of American Physicians and Surgeons, Atlantic City, May 3-4.

Ohio Public Health Association, Columbus, May 18-19.

Meeting of Section of Medical Sciences, Ohio Academy of Science

Ohio physicians are welcome to attend the meeting of the Section of Medical Sciences, Ohio Academy of Science, which will be held in Room 205, Taylor Hall, Wooster College, Wooster, May 6 and 7. Sessions will be from two to five o'clock, Friday afternoon, May 6 and from nine to twelve, Saturday morning, May 7. Physicians appearing on the program are: Dr. Harry E. King, Dayton; Dr. George M. Curtis, Dr. Italo D. Puppel, Dr. Frank E. Hamilton, Department of Surgical Research; Dr. Emmerich von Haam, Department of Pathology; Dr. Sloan J. Wilson, Dr. Wm. R. Arrowsmith and Dr. Carl V. Moore, Department of Medical Research; Dr. N. Paul Hudson, Department of Bacteriology, Ohio State University College of Medicine; and Dr. A. B. Brower, Dayton. A complete program may be obtained by addressing Dr. B. K. Wiseman, care Department of Medicine, Ohio State University College of Medicine, Columbus, who is vice-president of the Ohio Academy of Science, in charge of the meeting of the Section of Medical Sciences.

Postgraduate Lectures at Chillicothe to End May 19; Attendance Large

Concluding session of the Regional Postgraduate Lectures being presented by the Ohio State Medical Association for physicians of South-Central Ohio, will be held at the Elks' Home, Chillicothe, Thursday evening, May 19, beginning at 7 o'clock. The program is devoted to a discussion of "Arthritis". Dr. H. B. Weiss, Cincinnati, will speak on the "Medical Aspects", and Dr. Joseph A. Freiberg, Cincinnati, the "Surgical Aspects".

The practical talks presented on the Postgraduate Lecture Series at Chillicothe have met with an enthusiastic response. Attendance per session to date has averaged 144.

Recent speakers on the program were: March 31—Dr. George T. Harding, Columbus, "Common Psychoses"; Dr. Edward J. McCormick, Toledo, "Cancer of the Breast"; April 14—Dr. Loyal E. Leavenworth, Canton, "Prenatal and Postnatal Care: Management of Pregnancy"; Dr. Thomas P. Shupe, Cleveland, "Infections of the Urinary Tract"; April 28—Dr. Frank C. Clifford, Toledo, "Angina Pectoris and Coronary Thrombosis"; Dr. Howard J. Parkhurst, Toledo, "Fungous and Pyogenic Infections of the Skin".

Phillips Medal Is Awarded to Dr. Harry Goldblatt, Cleveland

Dr. Harry Goldblatt, Cleveland, professor of experimental pathology, Western Reserve University School of Medicine, was awarded the John Phillips Medal at a session of the American College of Physicians, April 6, at the Waldorf Astoria in New York.

The medal commemorates the late Dr. John Phillips who died in the Cleveland Clinic disaster. It is given "for outstanding contribution in the field of internal medicine or its allied sciences".

Award of the Phillips Medal to Dr. Goldblatt cites "development of an important method for the production and study of experimental hypertension in animals; demonstrating the importance of disease of the blood vessels of the kidneys in the origin of high blood pressure, and for contributing successfully to our understanding of the essential type, the most common disabling condition encountered by medical practice".

Dr. Goldblatt's hypertension research, carried on in the Institute of Pathology of Western Reserve University, consists in constricting the renal artery, which supplies blood to the kidneys, by means of a small, silver clamp. High blood pressure invariably results.

A graduate of McGill University in 1916, Dr. Goldblatt also studied at the Lister Institute of Preventive Medicine and the University College in London. He has been a member of the faculty of Western Reserve University School of Medicine since 1921.

INDUSTRIAL COMMISSION NAMES THREE MEDICAL REFEREES TO ASSIST IN ADMINISTERING NEW OHIO SILICOSIS LAW

As empowered by Sub. House Bill 71 enacted last year by the Ninety-Second Ohio General Assembly, adding silicosis to the list of occupational diseases compensable under the Ohio Workmen's Compensation Act, the State Industrial Commission has appointed the following physicians as silicosis referees: Dr. Raymond C. McKay, Cleveland; Dr. Joseph A. Muenzer, Toledo, and Dr. William M. Doughty, Cincinnati.

In selecting the referees, the Commission followed the provisions of the Act that they "shall be licensed physicians in good professional standing, who have by special duty, or experience, or both, acquired special knowledge of pulmonary diseases and at least one of said physicians shall be a roentgenologist". All silicosis claims must be passed on by the referees.



Dr. McKay



Dr. Muenzer



Dr. Doughty

Brief biographical data concerning the appointees, all of whom have had clinical experience with silicosis, follows:

Dr. McKay graduated at Western Reserve University School of Medicine, Cleveland, in 1920. He is in active charge of the tuberculosis unit of Cleveland City Hospital and is assistant department head of the medical staff of that unit. Dr. McKay also is assistant clinical professor of medicine at Western Reserve University. He is a member of the Ohio State Medical Association, Fellow of the American Medical Association, member of the National Tuberculosis Association, the American Sanatorium Association and the American Academy of Tuberculosis Physicians.

A graduate of St. Louis University School of Medicine in 1918, Dr. Muenzer served in the Navy Medical Corps from July, 1918, to August, 1919. From 1919 to 1925, Dr. Muenzer was on the staff of the medical dispensary at St. Vincent's Hospital and at Lucas County Tuberculosis Hospital. From 1921 to 1931 he did diagnostic work for the Bureau of Tuberculosis, State Department of Health. Dr. Muenzer has done experimental clinical research in endocrinology at St. Anthony's Orphanage. He is a member of the Ohio State Medical Association and the American Medical Association.

Dr. William M. Doughty is director of radiology at Christ Hospital and Children's Hospital, Cincinnati. He was formerly assistant director of roentgenology at Cincinnati General Hospital and formerly associate professor of radiology at the University of Cincinnati, College of Medicine, which positions he resigned to become a member of the Board of Directors, University of Cincinnati. A graduate of Miami Medical College, Cincinnati, in 1906, Dr. Doughty served an internship of 18 months in Cincinnati General Hospital and did postgraduate work in London and Vienna for one year. He is a past-president of the Cincinnati Academy of Medicine; member of the Ohio State Medical Association; Fellow of the American Medical Association, American College of Surgery and the American College of Roentgenology; member of the American Roentgen Ray Society and the Radiological Society of North America.

All claims for compensation for disability or death due to silicosis must be referred by the Industrial Commission to the silicosis referees for examination and recommendation with regard to the diagnosis, extent of disability and other medical questions in connection with the claim. Any employee filing a silicosis claim must submit to examinations, clinical and X-ray, ordered by the Commission. The act also provides that the Commission may designate a physician, a pathologist or such other specialist as may be deemed necessary, to make an autopsy examination and tests to determine the cause of death and certify written findings to the silicosis referees.

Reasonable compensation of the silicosis referees and of other physicians used and the expenses of examination and tests will be paid, if the claim is allowed, as part of the expenses of the claim; otherwise from the surplus fund of the Commission.

Silicosis is defined in the Act as: "A disease of the lungs caused by breathing silica dust (silicon dioxide), producing fibrous nudules, distributed through the lungs and demonstrated by X-ray examination or by autopsy".

NARCOTIC PERMITS MUST BE RENEWED BY JULY 1; IMPORTANT ADVICE AND SUGGESTIONS REGARDING PRESCRIBING

EVERY physician wishing to prescribe or dispense narcotic drugs must register with the Collector of Internal Revenue of his district and pay the Federal tax of $1.00 on or before July 1 annually.

Initial application may be made at any time, but thereafter the permit must be renewed each year on or before July 1.

Application for re-registration must be made on Form 678, with the physician's signature either acknowledged by two witnesses, or sworn to by a notary public or an official of the internal revenue department. The number of the physician's license to practice medicine in Ohio must be noted on this form. The registration number assigned by the Internal Revenue Department is retained from year to year.

The application must be accompanied by an inventory, on Form 713, of the narcotic drugs on hand in the physician's office. This inventory, in affidavit form, must be sworn to by a notary public or an official of the internal revenue department.

FORMS TO BE MAILED IN MAY

A copy of each of these forms will be mailed during the last week in May by the District Collectors of Internal Revenue to each Ohio physician already registered, with brief instructions on the procedure to be followed in renewing his license.

For the information of physicians who may not have received the necessary forms, or who may wish detailed information concerning the Harrison Narcotic Act, a list of the counties comprising the four internal revenue districts in Ohio, together with the names and addresses of the collectors, follows:

FEDERAL OFFICES LISTED

For the Cincinnati District (Ohio 1st) Collector of Internal Revenue Thomas J. Connor, Customs Building, Cincinnati, Ohio; comprising the following counties:

Brown, Butler, Clark, Clermont, Clinton, Fayette, Greene, Hamilton, Highland, Miami, Montgomery, Preble and Warren.

For the Toledo District (Ohio 10th), Collector of Internal Revenue Charles H. Graves, Toledo, Ohio; comprising the following counties:

Allen, Auglaize, Champaign, Crawford, Darke, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Logan, Lucas, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Shelby, Van Wert, Williams, Wood and Wyandot.

For the Columbus District (Ohio 11th), Collector of Internal Revenue Harry F. Busey, Federal Building, Water and Gay Sts., Columbus, Ohio; comprising the following counties:

Adams, Athens, Coshocton, Delaware, Fairfield, Franklin, Gallia, Guernsey, Hocking Jackson, Knox, Lawrence, Licking, Madison, Marion, Meigs, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Ross, Scioto, Union, Vinton and Washington.

For the Cleveland District (Ohio 18th) Collector of Internal Revenue Frank F. Gentsch, 262 Federal Building, Cleveland, Ohio; comprising the following counties:

Ashland, Ashtabula, Belmont, Carroll, Columbiana, Cuyahoga, Geauga, Harrison, Holmes, Jefferson, Lake, Lorain, Mahoning, Medina, Monroe, Portage, Richland, Stark, Summit, Trumbull, Tuscarawas and Wayne.

Failure to pay the required tax of $1.00 on or before July 1 adds a penalty of 25 per cent to the tax when it is paid. A record is kept by the internal revenue department of physicians who have been late in re-registering. **Several Ohio physicians were recently fined substantial amounts for delinquencies in paying narcotic taxes over a period of years. A physician who registers tardily, and who has prescribed or dispenses narcotic drugs during the interval within which his registration has lapsed, is liable to a fine of not more than $2,000 or imprisonment for not more than five years or both.**

Conviction of a violation of the Harrison Narcotic Act or the State Uniform Drug Act subjects a physician to suspension or revocation of his license to practice medicine by the State Medical Board.

IMPORTANT REMINDERS

For the benefit of physicians in the Columbus district, the local internal revenue office recently issued the following mimeographed form containing brief reminders relative to procedure under the narcotic law: (The references are to "Regulations No. 5", a copy of which may be obtained from any District Collector of Internal Revenue).

"1. These instructions should be **POSTED ON THE WALL** beside your desk for ready reference.

"2. If **YOU MOVE YOUR OFFICE**, notify the Collector at once. Page 28—Reg. 5.

"3. Don't try to buy Narcotic Drugs on your own prescription, **USE AN OFFICIAL ORDER FORM.**

"4. When you need a **NARCOTIC ORDER BOOK, SEND THE REQUISITION** (Form 679) with your 10 cents. Art. 67—Reg. 5.

"5. Your **NARCOTIC ORDER FORM** will be **FILLED BY A WHOLESALE DEALER**, (exception 1 oz. or less of aqueous or oleaginous solutions of 20 per cent or less, which will be filled by a Retailer). See Art. 12.

"6. Show your **REGISTRY NUMBER ON PRESCRIPTIONS** for Narcotic Drugs.

"7. If you maintain **TWO OFFICES**, each must be registered. Page 17—Reg. 5.

"8. If you intend to **DISCONTINUE YOUR REGISTRY** notify the Collector in ample time to receive and execute instructions prior to June 30.

"9. Don't fail to **RE-REGISTER ON TIME**

each year. Delinquency record may eventually embarrass you.

"10. **REPORT STOLEN NARCOTICS** to the Narcotic Agent, Federal Bldg., Columbus. Art. 59—Reg. 5.

"11. **DEATH OF ANY REGISTRANT** should be reported at once to the Collector. Instructions will be given as to disposal of Narcotics on hand, etc."

THESE POINTS SHOULD BE FOLLOWED

In addition to complying strictly with the above regulations, physicians should keep in mind the following recommendations of the Bureau of Legal Medicine and Legislation of the American Medical Association concerning the provisions of the Harrison Narcotic Act:

1. A practitioner who desires narcotic drugs for professional use, other than exempt narcotic preparations, must obtain them from a registered wholesale dealer, except that he may obtain aqueous or oleaginous solutions in which the narcotic content does not exceed 20 per cent of the complete solution, in quantities not exceeding one ounce at any one time, from a registered retail dealer, to be used in legitimate office practice. The writing of prescriptions for fictitious patients, to obtain narcotic drugs for general professional purposes, to avoid the use of official order forms and to avoid making purchases from registered wholesale dealers, is not permitted; narcotic drugs obtained on prescriptions are for the exclusive use of the patients named in such prescriptions. **All purchases for general professional use must be written on official order forms,** which may be purchased at a nominal cost from the collector of internal revenue with whom the practitioner is registered.

2. **Narcotic drugs should be kept under lock and key.** When necessarily carried about in course of practice, they should not be left where theft is easy, as in unlocked, unattended automobiles or in the dressing rooms of dispensaries or hospitals. If narcotic drugs are lost or stolen, or accidentally destroyed, the practitioner to whom they belong must make an affidavit, in duplicate, as to the kind and quantity of such drugs and the time and circumstances of the loss, theft or destruction. If the drugs were stolen, the affidavit should show that the local police authorities were promptly notified. One copy of the affidavit must be placed on file with the practitioner's duplicate order forms. The other must be filed with the narcotic agent in charge in the district in which the practitioner is registered.

MUST BE BONA FIDE PATIENTS

3. **A practitioner can lawfully administer, dispense and prescribe narcotic drugs to only such patients as are under his professional care.** The Harrison Narcotic Act does not limit specifically the quantity that may be used or the time during which the dosage may be continued. It requires only that the dosage be consonant with proper professional practice. It places no restriction on the form in which narcotic drugs may be administered.

The administration, dispensing and prescribing of narcotic drugs for the sole purpose of satisfying the cravings of an addict is not within the bounds of professional practice. That fact, however, does not prevent the continued use of narcotic drugs in such doses as may be found to be necessary to relieve the sufferings of a bona fide patient who has an incurable painful disease or to preserve the life of an aged and infirm addict whose life would be jeopardized by the withdrawal of his drug of addiction. A painful, incurable disease, or age and infirmity, must be present, however, to justify legally the indefinite continuance of the use of narcotic drugs. Instructions as to the form to be used in writing prescriptions in such cases are given later.

It is not unlawful under the Harrison Narcotic Act to attempt to cure narcotic addicts of their addiction, even though narcotic drugs are used in the attempt. If narcotic drugs are so used, the dosage from day to day must be accurately recorded. Unless there is a reasonably rapid reduction in the dosage and complete withdrawal within a short time, suspicion may rightly arise that the alleged attempt to cure is only a cover for the unlawful administration, dispensing or prescribing of narcotic drugs to satisfy the cravings of an addict. The best professional opinion seems to recognize the fact that an attempt to cure an addict outside the walls of a hospital or other institution is almost certainly doomed to failure and that attempts to cure under such circumstances can be justified, if they can be justified at all, only by some remarkable combination of circumstances.

BE CAREFUL OF STRANGERS

4. **A practitioner should not administer, dispense or prescribe narcotic drugs for a stranger, unless there is obvious necessity, as in the case of a severe accident.** To do so may be only to cater to addiction. It may result, too, in prosecution for violating the Harrison Narcotic Act, for the stranger in real or assumed distress may be in fact the agent of narcotic law enforcement officers.

5. A practitioner can lawfully administer narcotic drugs personally to his patients, hypodermically, by mouth or otherwise, in any form or amount, with such frequency and for such a period of time as may be justified by good professional practice. It is no part of professional practice, however, to administer narcotic drugs for the sole purpose of catering to narcotic addiction. **A practitioner is not required by law to keep a record of the narcotic drugs he administers. A record can do no harm however, if the adminis-**

tration of such drugs is lawful, whereas its absence may prove embarrassing.

6. A practitioner may lawfully dispense narcotic drugs personally to his patients. "To dispense," as the term is here used, means to supply narcotic drugs to a patient, to be taken by him out of the presence of the dispensing physician, as distinguished from the supplying of such drugs for immediate use by the patient in the presence of the practitioner by whom they are supplied.

A practitioner should avoid dispensing narcotic drugs, so far as is compatible with good professional practice in the community in which he is practicing. A too extensive resort to dispensing may justify a suspicion that the dispenser is only catering to narcotic addiction, unless the circumstances clearly show that dispensing is necessary. Under no circumstances should a greater quantity of narcotic drugs be dispensed than the minimum quantity required by existing conditions. The quantity should not exceed the quantity necessary to provide for the patient until he is to be seen again by the practitioner. If any greater quantity is called for, it should be provided through a prescription, so that the entire transaction may be a matter of record.

Only the most unusual conditions can justify a practitioner in delivering narcotic drugs directly to the patient for whose use they are intended. A person whose sufferings are aggravated and whose will is weakened by disease or injury should not be tempted to use narcotic drugs improperly, as he is tempted when such drugs are left with him, under his sole control, to be used whenever he feels that they are needed. Narcotic drugs dispensed for a patient should be left in the custody of some competent and discreet nurse or other person in attendance on him. To prevent accidental poisoning, the person in whose custody they are left should be carefully instructed and duly cautioned. The drugs dispensed had better be placed in a suitable package or container, bearing instructions as to their use. Carelessness in dispensing may lead to accidental poisoning and a suit for malpractice.

ADVISABLE TO KEEP A RECORD

7. **A record should be kept of all narcotic drugs dispensed.** The provisions of the Harrison Narcotic Act relating to such record keeping are confused and seem to be not susceptible of rational interpretation. Section 2 of the Harrison Narcotic Act authorizes a physician, dentist or veterinary surgeon to dispense or distribute narcotic drugs "in the course of his professional practice only," and then provides: "That such physician, dentist, or veterinary surgeon shall keep a record of all such drugs dispensed or distributed, showing the amount dispensed or distributed, the date, and the name and address of the patient to whom such drugs are dispensed or distributed, **except such as may be dispensed or distributed to a patient upon whom such physician, dentist or veterinary surgeon shall personally attend;** and such record shall be kept for a period of two years from the date of dispensing or distributing such drugs, subject to inspection, as provided in this Act." Section 6 requires that a record be kept of all the so-called exempt preparations that a practitioner dispenses, but it does not require a record of the exempt preparations that he administers or prescribes.

The practitioner who keeps a record of all narcotic drugs that he dispenses will be safe against prosecution, no matter how the law may ultimately be interpreted. The record should show the kind and quantity of narcotic drugs or preparations dispensed, the name and address of the patient, and the date of dispensing. Entries should be made on the day when the drugs are dispensed. The record should be kept for not less than two years from the date of dispensing.

ADVICE RELATIVE TO PRESCRIBING

8. Prescriptions for narcotic drugs may lawfully be written on any prescription blank. Every such prescription must contain, however, the patient's full name and address and the prescriber's signature, address and registration number. Practitioners commonly have their registration numbers printed on their prescription blanks and provide spaces for the other required entries. **Every prescription must be written in ink, with an indelible pencil, or on a typewriter.** It must bear the full signature of the prescriber, such as he would use on a check or in a deed. Every prescription must be dated and signed on the day on which it is written. The quantity of the narcotic drugs prescribed should be stated with clearness and accuracy, so as to safeguard against alteration. The act does not require a practitioner to keep a record of his prescriptions for narcotic drugs. Unless his office system provides such a record, in the ordinary clinical records of his office, it may be well to keep one.

TELEPHONE PRESCRIBING BANNED

A pharmacist cannot lawfully dispense narcotic drugs on telephoned instructions. If a practitioner cannot leave with his patient necessary narcotic drugs, and if the patient cannot send to a pharmacist a prescription for such drugs, the physician may telephone to the pharmacist such directions as may be necessary to enable him to compound the prescription. At the same time the physician should leave with his patient a corresponding written prescription for them. The pharmacist can then compound and dispense the needed narcotic drugs and send them by messenger to the patient. The messenger, however, must make sure before he delivers the drugs that he has in his possession a bona fide prescription for them. If a physician is called on at his office or elsewhere, by telephone or otherwise, to pre-

scribe for a patient with whose condition he is familiar, and if he believes that his patient needs a narcotic drug, he may follow the course just outlined, having the pharmacist's messenger obtain the written prescription at the practitioner's office or at some other designated place, before he delivers the drugs to the patient. The messenger carrying the narcotic drugs must be a bona fide agent of the pharmacist, so that from a legal standpoint the drugs do not pass out of the pharmacist's lawful possession before the prescription is delivered into it.

Since the passage of the Federal "Marihuana Act", effective October 1, 1937, (The Ohio State Medical Journal, October, 1937, issue, pages 1156-1157), physicians who administer, dispense or prescribe cannabis, must obtain a special permit and re-register annually on or before July 1, with the district collector of internal revenue, and pay a tax of $1.00.

Provisions of the Ohio Uniform Narcotic Act, effective September 5, 1935, do not require any registration or record-keeping in addition to that imposed by the Harrison Narcotic Act. It merely conforms the state narcotic drug statutes to the federal statutes. The Ohio act was explained in detail in the July, 1935, issue of *The Ohio State Medical Journal*, pages 539-542.

SEE YOU IN COLUMBUS, MAY 11-12!

Ask "Free Choice" by Athletes

The Council and Board of Directors of the Cleveland Academy of Medicine, have entered a protest with the Cleveland Board of Education regarding the distribution of funds for the care of injured high school athletes. At present, all injured athletes are required to go to one physician selected by the committee in charge of the fund if payment is to be made by the fund for medical services. Selection of a private physician by an injured athlete bars his family from participating in the benefits of the fund.

As an expression of principles, the Council and Board, at the suggestion of the Committee on Economics, adopted the following program at its meeting on March 8, and made it the basis for a letter of protest to the Board of Education.

"The responsibility for the care of an injured athlete rests with the athlete's parents who have given him permission to play. When an athlete is injured it should be the duty of the school physician or his deputy to refer the athlete to the physician of the parent's choice and to no other except in cases of dire emergency."

Ohio Helped to the Tune of Billion and a Half By Uncle Sam

A billion and a half dollars have rolled into Ohio from the Federal Government because of emergency spending from March 4, 1933, to December 31, 1937, according to a report recently submitted to Congress by Senator A. W. Barkley, Kentucky, giving a complete summary of new and emergency appropriations for that period. It showed that funds loaned and expended over the nation totaled $31,981,328,170. Of this, Ohio received $1,579,372,142 in loans and grants.

Ohio's total expenditures through the various agencies were listed in the report as follows:

Agriculture Adjustment Administration, $47,372,490; Farm Security Administration, $574,822; Civil Works Administration, $57,929,369; Farm Emergency Relief, $172,707,951; Civilian Conservation Corps, $44,354,303; Bureau of Public Roads, $56,301,637; Social Security, $30,151,051; Public Works, $97,547,060; Works Progress, $252,820,728; remainder emergency relief acts, 1935, 1936, 1937, $24,987,514; public buildings, $1,928,894.

Loans closed for the state were:

Reconstruction Finance Corporation, $269,418,382; Farm Credit Administration, $86,586,038; Commodity Credit Corporation, $372,904; Farm Security Administration, $2,879,097; Home Owners Loan Corporation, $305,881,793; Public Works, $25,928,771; Rural Electrification, $5,954,200; Disaster Loan Corporation, $1,270,728; Federal Reserve Board, $5,316,776. Total, $703,608,689.

Federal Housing Administration loans insured, $89,087,634.

Grand total, expenditures, loans, and loans insured, $1,579,372,142.

Tri-State Meeting Held at Findlay; New Officers Elected

Approximately 300 Ohio, Michigan and Indiana physicians attended the 65th Annual Meeting of the Northern Tri-State Medical Association at Findlay, April 12. Speakers included: Dr. H. H. Cummings, Ann Arbor, Mich.; Dr. Warren H. Cole, Dr. Max Thorek, Dr. Irvin S. Cutter and Dr. Max Cutler, Chicago, Ill.; Dr. Douglas Donald, Detroit, Mich.; Dr. Gilbert J. Thomas, Minneapolis, Minn.; Dr. Alan Brown, Toronto, Canada; Dr. J. S. Speed, Memphis, Tenn.; Dr. Charles A. Doan, Columbus; Dr. Daniel J. Davies, Cincinnati, and Dr. B. H. Nichols, Cleveland.

The following officers were elected for the ensuing year: Dr. J. N. Kelly, La Porte, Ind., president; Dr. Robert H. Elrod, Toledo, vice-president; Dr. D. R. Brasie, Flint, Mich., secretary; and Dr. E. B. Gillette, Toledo, treasurer. Councilors are: Dr. H. E. Randall and Dr. W. H. Marshall, Flint, Mich.; Dr. Burt Hibbard, Lima; Dr. O. P. Klotz, Findlay; Dr. L. T. Rawles, Ft. Wayne, Ind.; and Dr. G. O. Larson, La Porte, Ind. Next year's meeting will be held at South Bend, Ind.

Workmen's Compensation Fund Analyzed In Report of State Treasurer

Some interesting figures concerning the progress of the State Industrial Commission Insurance Fund during the past 10 years are contained in a recent report issued by Treasurer of State Clarence H. Knisley.

It will be noted that the fund decreased appreciably during the depression years, 1930, 1931, 1932 and 1933, owing to a considerable excess of disbursements over receipts during that period. Since 1934, the fund has increased approximately $16,000,000.

Report of the treasurer follows:

Receipts	Disbursements	Balance Dec. 31
	1928	
$15,153,408.88	$14,937,365.83	$53,093,493.79
	1929	
17,283,481.75	17,231,568.46	53,145,407.08
	1930	
14,498,991.50	17,440,519.32	50,203,879.26
	1931	
12,677,818.21	17,457,858.57	45,423,838.90
	1932	
9,285,390.82	15,733,350.20	38,975,879.52
	1933	
10,073,714.07	13,608,538.73	35,441,054.86
	1934	
16,232,100.89	13,252,627.29	38,420,528.46
	1935	
16,852,511.38	14,495,212.15	40,777,827.69
	1936	
19,865,069.70	14,996,887.60	45,646,009.79
	1937	
24,026,802.74	17,333,188.96	52,339,623.57
	Jan. 1 to March 31, 1938	
2,501,298.61	1,499,967.63	54,142,619.30

The balance March 31, 1938, shows $3,214,963.41 in cash and $50,927,655.85 in bonds.

Attorney General Opinions

Recent opinions of Attorney-General Herbert S. Duffy of special interest to the medical profession include:

No. 2111, March 18—Pursuant to Section 1359-7, G.C., a claim of the Division of Aid for the Aged in the Department of Public Welfare of the State of Ohio for old age assistance given the deceased recipient thereof is a preferred claim against the estate of such deceased recipient. Such preferred claim is prior to all claims specifically set forth in Sections 10509-121, G.C. (Note:—Such a claim would have preference over a claim for the expenses of the decedent's last sickness).

No. 2124, March 19—Where a defendant in a criminal case, upon arraignment on an indictment for arson, pleads not guilty by reason of insanity, and an examination of such defendant by medical experts for the purpose of informing the prosecuting attorney as to the sanity of such defendant, either before trial or for the purpose of testifying at the trial of such case, such a service is properly to be procured by the prosecuting attorney and the expense therefor, not being otherwise provided by law, it may properly be paid out of the fund arising under the provisions of Sec. 3004, G.C.

Pediatrics-Obstetrics Refresher Courses Arranged for June 2-3-15-16

The following refresher courses have been arranged by the Bureau of Child Hygiene, State Department of Health: Pediatrics, Ironton, June 2; Gallipolis, June 3. Obstetrics, Defiance, June 15; Bowling Green, June 16.

Dr. Elmer G. Horton, Columbus, professor of pediatrics, Ohio State University College of Medicine, will present the courses at Ironton and Gallipolis. Subjects to be discussed include: dysentery in infants and feeding; infectious diseases and immunization, and tuberculosis and syphilis in childhood.

Speaker for the Defiance meeting will be Dr. Charles E. Turner, Columbus.

Dr. Andrews Rogers, professor of obstetrics, Ohio State University, College of Medicine, will speak at Bowling Green.

Among the subjects included in the obstetrical courses are: forceps, indications and use; toxemia; hemorrhage, and possibly analgesics in home deliveries.

Tentative arrangements for these meetings call for sessions in the afternoon and evening, with dinner at 6 o'clock. A round-table discussion will be conducted after each session. Physicians residing in the vicinity of the meeting places will receive a notice with additional information concerning the meetings.

Annual Meeting Guest Speaker is Rated "Leading Authority"

The Fourth Annual Session of the American Neisserian Medical Society will be held in the Public Health Auditorium, Washington, D. C., May 16 and 17. One of the features of the meeting will be a symposium on sulfanilamide at which Dr. Perrin H. Long of Johns Hopkins Hospital will deliver the principal address. Announcement of the meeting states: "Dr. Long's work puts him in the position of being the country's leading authority on the chemistry, mode of action, and clinical use of sulfanilamide. The society is indeed fortunate and highly honored in having Dr. Long as guest speaker". Dr. Long is one of the guest speakers at the 92nd Annual Meeting of the Ohio State Medical Association at Columbus, May 11 and 12).

Heart Association Meeting

The Fourteenth Scientific Session of the American Heart Association will be held June 10 and 11, from 9:30 A.M. to 5:30 P.M., in the Sir Francis Drake Hotel, San Francisco, California. On Friday, June 10, the general heart program will be given and on Saturday, June 11, the program of the Section for the Study of the Peripheral Circulation will be presented.

HEIGH-HO, HEIGH-HO, TO 'FRISCO WE WILL GO! PACK UP YOUR TRUNK, AND RESERVE A BUNK, HEIGH-HO, HEIGH-HO!

RESERVATIONS for the Ohio State Medical Association Special Train to San Francisco and the American Medical Association meeting next June are being received at a merry clip by the State Headquarters Office, Columbus.

Between 80 and 90 members and their wives have been booked for this great sightseeing trip.

If there is any member who does not know about this trip and who would be interested, it is suggested he turn to pages 313-320 of the March, 1938, issue of *The Journal* where he will find complete details regarding itinerary, costs, etc., or write the Executive Secretary asking for the special pamphlet about the project.

By comparison, the Ohio Special Train itinerary stacks up with the trips proposed by independent agencies and when it comes to cost, the Ohio project has all the others beaten by a mile.

Doubtless there are quite a number of members who have been planning to join the Ohio party but who have delayed, for one reason or another, in making reservations. For their convenience, the following reservation blank has been prepared. Check off the type of accommodations desired, fill in the name or names, clip the coupon and mail it to the Headquarters Office, 79 East State Street, Columbus. Upon receipt, reservations will be made and additional details and instructions mailed.

OHIO SPECIAL TRAIN RESERVATION

Reserve the following space on the Ohio Special Train to San Francisco for:

(Name or names) _____

_____

(Check space desired): 2 in lower berth ☐ 1 in upper berth ☐ 1 in lower berth ☐ 3 in drawing room ☐ 2 in compartment ☐ 2 in drawing room ☐

(Signature of person making reservation) _____

(Address) _____

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Surveys Alone Will Not Solve Medical and Health Problems

Elsewhere in this issue reference is made to the survey of medical care sponsored by the American Medical Association and to the action of The Council of the Ohio State Medical Association in pledging its active support to the conduct of the study in Ohio.

The Journal is 100 per cent behind The Council and the A.M.A. regarding the proposed survey. The idea is sound and the results will be extremely valuable, providing each physician does his part. What follows should be interpreted as supplementary and not as criticism of the study.

While trying to evaluate the good which may come from the A.M.A. survey (better, perhaps, if we should call it now the Ohio State Medical Association survey) and analyzing the methods suggested for conducting it, we ran across the following paragraph in the editorial columns of *The Kansas State Medical Journal*, dealing with the same subject and which seems to hit the nail on the head:

"We may continue to survey and analyze; but until an educational campaign is developed and sustained, the public will not be prepared to accept good medical service, regardless of how it is organized and administered. The relation of poverty and ignorance to the health of the population is such that there can be no solution of the medical problem until the whole population is prepared through education to accept with intelligence the broad conception of health, with its economic and social implications."

The point is: Even after the A.M.A. survey is completed, the data analyzed and conclusions drawn, there still is a whale of a big job left—getting the facts to the people and keeping up a sustained educational follow-up campaign.

Such a program cannot be conducted from a centralized agency—national or state. Folks—most of them at least—take little stock in what some higher-up in some distant city has to say about the medical and health problems of their community. However, they will listen to what Dr. Bill Smith of Main Street, family physician de luxe, has to say or what the Blank County Medical Society believes should or should not be done. This puts the matter right into the laps of the individual physician and the county medical unit.

If the medical profession has fallen down on the job, right there is the bump which tripped it. The profession has been weak in public relations, although in some communities this weakness is being gradually overcome.

First, the profession anywhere must render the kind of service which will win the approval of the public in general; second, it must tell the public about the good things which the profession is doing for the community; and third, it must capitalize on the public confidence thus created by assuming leadership in the community on medical and public health matters, which leadership too often is taken by those outside the medical profession.

We suggest the use of the phrase "tax-supported medical service" instead of the rather hackneyed and incoherent term "state medicine". Nothing like letting the tax-payers realize that they are footing, and will continue to foot, the bill for governmental, bureaucratic medical service.

This Month's Bouquet Goes to Annual Meeting Committees, and Others

On the cover page of this issue, *The Journal* presents the third of a series of group pictures of members of the State Association who are taking prominent parts in arrangements for the Ninety - Second Annual Meeting of the Association, May 11 and 12, 1938, at the Neil House, Columbus.

The members whose photographs adorn this month's cover page are chairmen of various Columbus committees in charge of important local details. Dr. Dodd and Dr. Morrison are general chairman and vice chairman, respectively, of the local committees. Dr. Morrison also is president of the Columbus Academy of Medicine, 1938 Annual Meeting host. Dr. Bigelow, former president of the State Association, is chairman of the Reception Committee. Dr. Barney is head of the important Committee on Halls and Meeting Places and Dr. Reinhart is chairman of the Committee on Projection Apparatus. The Banquet Committee is headed by Dr. Jentgen and Dr. Paul Palmer is directing the Committee on Hobby Show.

Obviously, these chairmen are receiving splendid assistance from the members of their committees and they must share with such members the credit for the fine local arrangements which are being completed.

This year's Annual Meeting would have been

only a pipe dream had it not been for the excellent job of the members of the Committee on Scientific Work, whose photographs were published in January; the splendid work done by the officers of the Scientific Sections, whose pictures appeared in the February issue of *The Journal*, and the activity of the Columbus committee chairmen and their helpers.

All of these committeemen and section officers have worked faithfully on Annual Meeting details. Of course, there are many others who have had a part in the arrangements to a lesser degree. All deserve a vote of thanks and appreciation by the membership of the Association. Our hat is off to men like these who are willing to give some of their time and effort "to the upbuilding of the profession to which they belong" and voluntarily lend active assistance to the affairs of their professional organization.

Modern medical education must of necessity be an intensive and continuous process; and because of these rapid advancements, one will find that, unless he participates in this continuous process, much of the progress will have passed him by.—Journal of the Medical Society of New Jersey.

Ohio Congressmen Who Voted "Right" Should Be Congratulated

Defeat in the national House of Representatives of the famous, or infamous, Reorganization Bill, depending on viewpoint, ended temporarily at least the move to combine the public health and public welfare activities of the Federal Government under a new department to be known as a Welfare Department.

Believing that public health work should stand on its own feet and not be dominated by welfare activities and professional welfare workers, the medical profession of Ohio openly opposed that section of the Reorganization Bill. If a consolidation of public health activities of the Federal Government is essential, a department of health should be created, divorced from public welfare functions of the government.

Members of Congress from Ohio had been advised on several occasions, the last time during the catch-as-catch-can fight on the Reorganization Bill, of the attitude of their physician constituents on this matter. Those who voted against the bill were: Senator Donahey and Representatives Ashbrook, Bigelow, Claypool, Crosser, Dixon, Fleger, Fletcher, Harter Hunter, Imhoff, Lamneck, Polk, Secrest, Sweeney Jenkins and White.

Physician constituents of these men, providing they agree with the action which they took, should not overlook congratulating them at the first opportunity. Politics is not a factor in situations like this. There may be efforts to revive the provision to combine health and welfare activities. Therefore, physicians should continue to warn their congressman of the dangers of this combination. Public health and public welfare are separate and distinct activities. The latter should be headed up by competent members of the medical profession and not be subjected to dominance by those in the welfare field.

From the welter of acrimonious discussion concerning medical organizations that has gone on both within and without the profession during the last few years, at least one significant fact emerges and that is that the medical profession cannot live to itself alone.—James Alexander Miller, M.D., president, New York Academy of Medicine.

Present Policy On Vaccination and Immunization Outlined

Recent outbreaks of smallpox in some parts of the state have caused some temporary misunderstandings between public health and public school officials and the medical profession in those communities. Fortunately, these tempests in a tea pot have subsided quickly and preventive measures have not suffered.

The policy of medical organization, as established by the House of Delegates of the Ohio State Medical Association, on the question of procedure involving vaccination, as well as immunization, is clear and definite. Clarification is not necessary but reiteration may be helpful.

In general, the agreement of long-standing between the State Medical Association and the State Department of Health on these matters is as follows:

1. Members of the staff of the State Department of Health will assist and cooperate with local public health officials in preventive activities, providing the local health department requests such assistance and providing the work of vaccinating and immunizing children by public health officers has the approval of the county medical society.

2. Public health departments—state or local—may intervene in a time of emergency or severe epidemics if the local medical profession requires assistance or if local physicians have failed to cooperate in combating the emergency or epidemic.

3. Local public health officers should work closely with the local medical profession, seeking the advice and assistance of the county medical society whenever possible. Vaccination and immunization should be conducted in a manner agreeable to the county medical society provid-

ing the procedure recommended by the society is adequate and practical.

These general policies are elastic enough to permit procedure to vary from county to county but still conform to the will of the medical profession. If observed by both health officer and medical society, there is little chance of misunderstanding or conflict. Obviously, planning and compliance are primarily local matters which should receive the attention of local health departments and local medical societies.

According to News-Week: "New Deal leaders have drafted plans for a large-scale national health program to be financed by the Federal Government. The first move calls for a national health conference—probably in early fall." Ask your next door neighbor if he wants to put up more taxes to pay for more "big-scale" programs, especially one which would make those already undertaken seem like a pink teaparty.

Everybody On "the Spot" When a Few Shy at Fair-Play

The Workmen's Compensation Law in New York contains a provision which is somewhat unique—at least there is no similar provision in the Ohio Workmen's Compensation Act.

Under the New York State Act, a committee of arbitration is created in each county. It is named by the county medical society. Such committees are expected to adjudicate disputed medical and hospital bills presented for services in workmen's compensation cases.

According to *The Medical Record*, an independent medical publication of New York State, during 1937, a total of 683 disputed bills, representing money totaling $62,001.52 were arbitrated by such committees. Final awards approved by the arbitration committees totaled $34,110.50, indicating an average reduction of each disputed bill of 45 per cent.

This would appear to indicate that the medical profession does not condone excessive charging on the part of physicians and has the courage to state when it believes members of the profession are engaged in over-charging or rendering unnecessary services.

In some cases filed with the Ohio Industrial Commission there is rather conclusive evidence that the physicians treating such cases have been somewhat ambitious with respect to fees. These instances put the Commission "on the spot" and eventually cause unpleasantness which could just as well have been avoided. Also, it makes the situation a bit tough for the many, many physicians who stick to the fee schedule and maintain a reasonable attitude.

We hold no brief for the Commission whenever it makes mistakes or administrative details are poorly handled. These should not happen—the Commission is just as anxious to prevent them as anyone else. Nevertheless, a mistake on the part of the Commission (many of which can be properly adjusted if called to the attention of the proper official) does not give a physician or anyone else the right to initiate abuses which reflect on the honesty and intelligence of the entire medical profession. Two wrongs will not make a right by whatever formula used. There are no arbitration committees in Ohio. None will be needed if each physician will deal squarely with the Industrial Commission, if the Commission will continue to try to rectify mistakes and improve administrative procedure; and if the cooperative relationship now existing between the Commission and the Ohio State Medical Association can be maintained, making possible the "arbitration" of cases in an informal way. In our opinion the individual physician is a key-man in this matter.

Usually the members who are most willing to assist in some activity of medical organization are the ones who have no reason to complain about business, indicating that there must be something to the idea that he who helps others, helps himself.

Why Every Physician Should Be a Fellow of the A. M. A.

Are you a fellow of the American Medical Association or a **member**? Does subscribing to *The Journal of the A.M.A.* automatically make you a fellow? What's the difference between membership and fellowship anyway?

Since only fellows of the A.M.A. may attend the annual meeting of that Association, which will be held this year in San Francisco, June 13 and 17, and may be held in Cleveland in 1939, a clarification of fellowship-membership status seems timely.

A member of a county medical society automatically becomes a **member** of the Ohio State Medical Association and the American Medical Association, but **not** a fellow of the A.M.A. To become a fellow of the A.M.A., a member must make application to the A.M.A., and pay annual fellowship dues of $7.00 per year. Only fellows may register and participate in the annual meetings of the A.M.A., or hold offices in that Association. As part of his fellowship rights and privileges, a fellow receives, without additional cost, *The Journal of the American Medical Association*, published weekly. **Mere subscription to The Journal of the A.M.A., does not constitute fellowship in that Association.** Approximately 1,200 Ohio physicians who subscribe to *The Journal of the A.M.A.* at $7.00 per year are not fel-

lows, although they could be without paying anything additional.

Now, are you a member or a fellow of the A.M.A.? The prestige of fellowship listing in the A.M.A. directory, and 52 copies of *The Journal of the A.M.A.* yearly, is certainly worth $7.00. How can you become a fellow? Write to the American Medical Association, 535 N. Dearborn Street, Chicago, Ill., and request an application blank.

What do you know about the men from your county who have filed for nomination to the State Legislature? Now is the time to find out something about them—not after the August primaries or the November election.

Deaths from Alleged Cancer Remedy Sound Important Warning

Newspaper accounts of the death of 11 persons in Florida following injections of a preparation for the treatment of cancer only a few months after the elixir of sulfanilamide episode with a death toll of 76, in our opinion calls for a reiteration of the oft-repeated warning to Ohio physicians against the use of unapproved products and methods of treatment.

According to *The Journal of the American Medical Association*, "Rex," the serum used in Florida, is a product of the Biochemical Research Foundation of the Franklin Institute of Philadelphia, and is akin to "Ensol", made with a special substrate of cancer tissue.

The "ensol" treatment for cancer was first launched in October, 1935, by Dr. Hendry C. Connell, Kingston, Ontario. Warning against the use of "Ensol", *The Journal of the A.M.A.*, October 5, 1935, declared in part: "The account of the methods pursued by Dr. Connell in promotion of his product reveals procedures more like those of a charlatan than that of the scientific investigator . . . Public officials, university officials and some Canadian physicians have been led into participation in the promotion of a project which will inevitably bring them grief. . . . Faith may move mountains but it is yet to be shown that it will cure cancer, even when given in the form of something called "Ensol".

It is reported that "Ensol" and "Rex" have been sent broadcast, without charge, with a view to obtaining experimental therapeutic evidence. Neither product has been licensed for interstate sale. Manufacturers of the products have been absolved by government agencies from "intentional guilt in the preparation of the serum".

In our opinion, the situation calls for placing the responsibility on two sets of shoulders. First, it's high time Congress enacted legislation to prohibit shipment of dangerous medicines. Second, in order to properly fulfill their moral responsibility to their patients, physicians must use only such products and methods of treatment as have been tried and approved.

The well-informed, conscientious and faithful physician is the one most essential factor in the provision of good medical care.—Frederick E. Elliott, M.D., New York.

Time for the Real Educators—Physicians—To Do the Teaching

Periodically a bulletin known as *"The Health Officer"* reaches our desk. It is a bulletin issued by the United States Public Health Service. Usually it contains numerous articles of interest and value.

Before quoting from an article, "The Physician As Educator", which appeared in a recent issue of that publication, we would like to take advantage of our editorial rights by stating in a few words what we believe the writer of that article is driving at.

What, in our opinion, he has said (perhaps not as directly) is:

It is time for all physicians to come out of their shell; tell the public things it should know about medical and health matters; take a more active part in public and civic affairs; take the public into its confidence with respect to the economic and social side of medicine and medical service; become teachers and missionaries instead of permitting the flag-wavers and professional do-gooders to hog the spotlight of molding public opinion; practice preventive, as well as curative medicine; continue to shun personal glory and publicity but let the public know that the medical profession as a unit ought to be the people's advisor on medical and health questions; try to improve the technique necessary to accomplish these things.

Read what follows to see if you agree with our interpretation, as it were:

"That the modern physician has something very definite to contribute to education is an idea that has now invaded both medical and educational circles. This has come about because the modern physician occupies a very unique and increasingly important place in society. Our class A medical schools turn out men who have been carefully trained in those special fields of knowledge which deal with the structure, the function and the behavior of human beings. In fact medicine covers some part of nearly all the biological sciences. No type of education, therefore, has broader foundations than medicine and we know of no discipline that gives the same broad outlook, the same attitude toward life, the same mental stance.

"At the risk of being tiresome, let us repeat

that the physician as a highly specialized biologist proposes to take care of, and guide and direct the most intricate, the most complicated and in many respects the most delicately sensitive of all living creatures. To be a good physician and to keep abreast of all advances in modern medicine is no small achievement. Indeed, no physician can fulfill successfully his mission in the present-day world unless he is fairly well-grounded in psychology, sociology, criminology and even economics and government. He must know something about all types of human institutions and be familiar with all forms of human behavior, habits and customs. In brief, nothing human must be foreign to him. This is doubly true for the public health physician and health officer. In this competitive, struggling world, individual designs for living must be based necessarily on a thorough knowledge of life and life processes, if the youth of the land are to be given the best possible chance for survival and the best possible chance for the achievement of useful, happy lives.

"Who but the physician is equipped to impart effectively knowledge of life? Preventive measures are rapidly becoming the heart and soul of all medical practice and all health officers realize that health education is rapidly becoming the heart and soul of preventive medicine. The public can not be expected to cooperate in the promotion of health and the prevention of disease unless they thoroughly understand the rules of the game.

"All types of education—in the home, in the kindergarten, in the school, in the reformatory, and in the clinic—have exactly the same purpose. The purpose may be summarized in two words, 'healthful living'.

"The primary goal of the teacher and educator is mental health—keeping students healthy at the psychic level, while the primary goal of the physician, at least in past decades, has been physical health—keeping patients well at the physical level.

"But thanks to modern psychiatry and psychology, we now know that the old doctrine of the dualism of mind and body is a myth. Mind and body are one and inseparable. Whatever affects the mind affects also the body and whatever affects the body affects the mind. Thus the aims of the teacher and the aims of the physician must merge.

"As it stands now in education, the medical group has the information and the educational group has the teaching technic, but it is extremely rare to find the same qualifications in the same person. Should not the physician who has the information develop his own technic? Is it not true that one has a thorough grasp of any subject only when he can effectively tell it to others?"

This month's best joke is the action taken in several cities, notably Chicago, and the Bronx district of New York, banning the sale of one issue of Life, because that magazine reproduced a number of scenes from the motion picture, "The Birth of a Baby", produced by the American Committee on Maternal Welfare. Some of the sex magazine manufacturers must be laughing themselves to death.

Study of Public-Care Figures Produces Dismal Picture

Figures compiled by the energetic reporter employed by one metropolitan daily in Ohio reveal that in the vicinity of one-sixth of the population of Ohio is being cared for in whole or in part at public expense.

The analysis shows that approximately 1,050,000 Ohioans are sharing in an aggregate annual fund of approximately $160,000,000, based on current expenditures.

The breakdown in approximate figures follows: W.P.A., 150,000 cases, representing 450,000 persons, $86,000,000; direct relief 141,000 cases, representing about 425,000 individuals, $30,000,000; old age pensions, 105,500 persons, $29,000,000; dependent children, 28,500, $4,885,000; blind, 3,800 persons, $850,000; state institutions, 38,000 inmates, $8,000,000.

This is something to think about, to put it mildly. Where are we going from here? Can the parade to the public coffers be stopped? If so, how and when? Will decentralization of these agencies turn the trick? Do local communities want decentralization and will they be willing to shoulder the responsibilities for caring for those actually in need, based on actual facts?

These are some of the questions which occur as one studies the situation. The answers? The solution? They must be dictated by those who foot the bills—you and others who pay taxes.

A good speech should have a good beginning and a good ending, and keep the two as close together as possible.—Persian Proverb.

Membership Also Good Financial Investment, Member Decides

There are innumerable services, often quite personal in scope, which are being performed daily by the State Headquarters Office, Columbus, for individual members of the State Association. The Headquarters Office, established and supported by the membership for such purposes and to act as a clearing house for activities of the State Association, is glad at all times to be of service to members and make a sincere effort to get results.

Following is an excerpt from a letter recently received by the Headquarters Office from a member who had been having a little difficulty in getting a check from the State Industrial Commission and who had requested the Columbus office to investigate the matter for him:

"Check in payment of the above claim was re-

ceived yesterday. Please accept my thanks for your capable handling of this manner.

"Aside from a feeling of satisfaction in belonging to the organization representing one's profession, it would seem that it is a good financial investment as well to belong to the Ohio State Medical Association."

This is called to the attention of the membership not for the purpose of setting up the State Headquarters Office as a little tin god of efficiency (it makes mistakes, too, and doesn't always get the results it hopes to achieve) but to re-emphasize to all members that there is an office in Columbus which always is at their service and willing to help in every possible way. Those who really appreciate the value of belonging to the Ohio State Medical Association are those who take advantage of the services and benefits which it offers them as a part of membership privileges. Those who fail to make use of their Association are the losers.

In all things relating to disease credulity remains a permanent fact uninfluenced by civilization or education.—Sir William Osler.

There seems to be some misunderstanding in some counties regarding the administration of poor relief.

Misunderstandings About Relief Setup Exist; Method Clarified

As pointed out before in *The Journal*, the administration of poor relief now is a local responsibility and activity of government. The relief problem must be handled by cities, townships or a county, or by a combination of these governmental agencies.

There is no state relief commission or state relief director. The state government still is contributing some funds to counties for relief work. Such funds are turned over to the county commissioners who may administer relief on a county-wide basis or may allocate money to the various cities and townships for relief within those sub-divisions.

Records of the various relief-administrating agencies are audited periodically by inspectors of the State Auditor's office. Obviously, it is the duty of such auditors to uncover instances of failure to follow provisions of the law in administering relief and evidence of irregularity on the part of administering officers, beneficiaries of relief or those participating in relief work. However, the responsibility of budgeting relief funds and disbursing the same rests on the local relief agency. In other words, the representative of the State Auditor's office has no authority to dictate to local relief agencies how much or how little shall be paid to physicians for medical care of those on relief. There is no state-wide fee schedule for such work. Fees should be worked out locally between relief agencies and the county medical society or individual physicians. Obvously, exorbitant charges and unnecessary services cannot be tolerated by relief agencies. Anyway, such practices on the part of any physician would not only be illegal but unfair to those physicians who are dealing honestly with relief agencies.

It will be a blessed day for the public when all who practice the healing art, no matter by what method, are compelled to submit to the same training and conform to the same standards. —Maxwell Lick, M.D., Erie, Pa., president of the Pennsylvania Medical Society.

A Swell Way for You To Throw Away Some Hard-Earned Cash

Attempting to crack down on organizations soliciting physicians (probably other professional men, also) to take listings in a directory under the guise that such directories are being used by insurance companies and claimants has become one of the current activities of the State Division of Insurance and Better Business Bureaus of the state.

Recently one Ohio physician requested the Columbus Better Business Bureau, Inc., to give him information about one of these organizations whose representatives are working parts of Ohio. He received a reply from the Columbus bureau which read, in part, as follows:

"We understand that these people are soliciting doctors to take listings in their directory on the representation that these directories will be used by insurance companies and claimants under casualty insurance policies. Some time ago the American Medical Association made a survey among the leading insurance companies of the country to ascertain what use, if any, they made of such directories. The American Medical Association reports the insurance companies told them that they make no use of such directories because they first of all depend upon their own medical staffs and, if they had to refer to any directory, they use the directory published by the American Medical Association listing all physicians with their qualifications.

"Some years prior to this the Judicial Council of the American Medical Association publicly condemned the inclusion of physicians in any directory as that of the_____as unethical and improper solicitation of practice."

It seems unnecessary to even attempt to amplify the above warning. Of course, if any physician has an overwhelming desire to throw away some of his hard-earned money, he will find the

directory salesmen ready and willing to assist him. He should keep in mind, however, that the representations made concerning the directories are the bunk.

We must deal collectively with the exploitation of our profession and the services it renders. Much depends upon how county societies and individual members act. Unity of purpose and action is the most effective method for safeguarding the future of our profession.—California and Western Medicine.

A touch of humor now and then is a good tonic. In our opinion the medical profession must use a little in these days of uncertainty and tribulation.

Not Doing Much, But Still a Going Concern, Which is Something

The following excerpt from *The Journal of the Arkansas Medical Society* ought to tickle a few of our readers. In it there is a moral: As long as a concern is a going concern, there is some hope that it will be able to do something, sometime, somehow:

"Dear Sir:

"Complying with your request of Jan. 5th.

"The Franklin County Medical Society held a meeting on the regular date, December 14, 1937, at Dr. Gibbons' office, Ozark, with Gibbons, Porter, Post, Hansberry and Douglass attending. President Porter in the chair. We had some trouble to keep Dr. Gibbons in attendance as he was being called out constantly. Once he was away 45 minutes and returned in an hour. Then he turned down several calls to see a sick nigger who was about to die. Doc finally got there and pulled him through. We stayed in session and elected the following officers for 1938:

"President, J. L. Post, Altus; Vice-President, W. H. Gibbons, Ozark; Secretary-Treasurer, Thos. Douglass, Ozark; Delegate to State Society, Thos. Douglass, and Alternate, W. C. Porter.

"Dr. W. H. Bollinger was the first to send in his dues. Dr. Porter and Douglass paid dues—three to date.

"We hope to roll up a membership of seven for this year. We voted to have our annual banquet some time soon. We are a going concern—but not doing much.

Yours very truly,

THOMAS DOUGLASS, *Secretary.*"

"Medicine" is on the "march", and to lead we must have leaders in national, state and local societies thinking and working to solve the problems of medicine as a profession and not individually.—F. M. Douglass, M.D., in President's Annual Address, Toledo Academy of Medicine.

Not long ago at a meeting of the Ohio State Bar Association, Dr. Carey P. McCord, formerly of Cincinnati, now of Detroit, addressed the conference on the subject of occupational diseases.

Prevention is Best Way to Solve Problem of Occupational Diseases

The following statement made by Dr. McCord seems to us to be unusually pertinent and sound:

"The real method of disposing of occupational diseases is not through legislation, compensation, litigation, but instead through prevention. The best service that you may render labor and industry in this state is to sponsor laws and attitudes that will place emphasis upon disease prevention rather than upon any other aspect of this matter. For every exposure in industry that might lead to an occupational disease, there is some preventive measure that may forestall their actual occurrence. Harmless chemicals may be substituted for harmful ones. Wet processes may be substituted for dry processes. Exhaust systems may be utilized to carry off effete materials. Workers may be supplied with protective devices. Primarily, you are not responsible for the installation and provision of such devices, but your knowledge of their need may go far in building up a total attitude throughout the state that will eventuate in their universal adoption."

The medical profession can play a big part in efforts to solve the problem of occupational discases, first, by keeping up with the scientific advances being made in this field; second, by cooperating with industry on preventive measures. Dr. McCord's argument is to lock the barn door now, not wait until the horse is stolen.

New Social Security Form Saves Work For Employer and the Government

A reduction in the number of employer reports required by the Treasury Department in connection with the administration of Federal old-age insurance will be effected through the new form which combines tax returns and wage reports and which was due April 30.

The new quarterly form, known as SS-1a, takes the place of the monthly tax return and of the 6-month information return previously filed by employers for 1937. On this one form, employers will hereafter report all the information previously given on monthly tax returns, Form SS-1, and 6-month information returns, Forms SS-2 and SS-2a. Payment by employers of their taxes and their employees' taxes will be made quarterly when the new Form SS-1a is filed. Other quarterly returns for 1938 on this form will be due on or before July 1st, October 31, and January 31, 1939.

FINAL REMINDER ABOUT HOTEL RESERVATIONS FOR ANNUAL MEETING; GET YOUR ROOM NOW!

THIS is the final reminder that to insure yourself of receiving the type of hotel accommodations you desire while attending the Ninety-Second Annual Meeting of the Ohio State Medical Asosciation at the Neil House, Columbus, Wednesday and Thursday, May 11 and 12, you should make reservations immediately.

If you have not attended to this important detail of your preparations for attending the Annual Meeting, look over the appended list of Columbus hotels with their rates and accommodations, fill in the accompanying blank and mail it NOW to the manager of the hotel selected.

You'll start for Columbus with greater anticipation if you know that a comfortable hotel room will be ready for your occupancy on arrival.

NAME AND LOCATION	No. of Rooms	Single	Double	Double Twin Beds	Suites
NEIL HOUSE (Headquarters Hotel) 35 South High St.	665	$3.00–5.00	$4.50–6.00	$5.00–7.00	$7.00 and up
DESHLER-WALLICK Broad and High Sts.	1000	3.00–7.00	4.50–10.00	5.00–10.00	8.00 to 18.00
FORT HAYES 31 W. Spring St.	350	2.00–3.50	3.50–6.00	4.00–8.00	7.00 to 18.00
CHITTENDEN High and Spring Sts.	275	2.00–3.00	3.00–4.00	3.50–6.00	
SENECA 361 E. Broad St.	250	2.00	3.00 and up	4.50–6.00	5.00 and up
SOUTHERN High and Main Sts.	250	2.00–3.00	3.00–4.00	4.00–4.50	
VIRGINIA Third and Gay Sts.	150	2.00 and up	3.00 and up	4.00 and up	5.00 and up
BROAD-LINCOLN 631 E. Broad St.	140	2.00 and up	3.00 and up	4.50 and up	3.50 and up

HOTEL RESERVATION BLANK

Mail this coupon to hotel selected

Manager _____ Hotel, Columbus, Ohio.

You are requested to reserve the following accommodations during the period of the Annual Meeting of the Ohio State Medical Association, May 11-12, 1938, or for such other period as may be indicated herein.

☐ Single Room with bath ☐ Double Room with bath Price: _____

☐ Twin Bed Room with bath ☐ Suite

Arriving May _____ at _____ A.M. _____ P.M.

PLEASE VERIFY MY RESERVATION.

Name _____

Address _____

_____

IN MEMORIAM

Harlan L. Byington, M.D., Risingsun; Physio-Medical Institute, Cincinnati, 1876; aged 87; died March 29. Dr. Byington practiced medicine in Fostoria from 1876 to 1880, after which he opened an office in Risingsun, continuing in active practice there until handicapped by failing health during the last few years. His hobbies were hunting and travel. Dr. Byington was a charter member and first chancellor-commander of the local K. of P. Lodge. A son and a daughter survive.

D. Iris Cochran, M.D., Millville; Cleveland-Pulte Medical College, (Homeopathic), 1903; aged 61; died March 20. Dr. Cochran practiced in Millville for 33 years. He had been in ill health since August, 1936. Dr. Cochran was a member of the Federated Church, K. of P. and Masonic Orders. His widow, two sons and a daughter survive.

John Pierce DeWitt, M.D., Canton; Cleveland College of Physicians and Surgeons, 1895; aged 68; member of the Ohio State Medical Association, Fellow of the American Medical Association and the American College of Surgeons; died March 29. One of the best known physicians in Ohio, Dr. DeWitt had long been active professionally and in the affairs of organized medicine. He had practiced in Canton for 41 years after having been in East Sparta for two years. Dr. DeWitt was a past-president of the staff of Aultman Hospital, Canton, and the Stark County Medical Society which he had represented many times in the House of Delegates of the Ohio State Medical Association. Since May 2, 1923, he had been a delegate of the State Association to the American Medical Association. Dr. DeWitt was a regular attendant at state and national medical meetings. He was also prominent in the activities of the Ohio and American Medical Golfers' Associations. During the World War, he served in the Medical Corps of the U. S. Army. A member of the First Christian Church, Dr. DeWitt was also affiliated with the Canton Club, B.P.O.E., and the Masonic Order. His widow, two sons, a sister and a brother survive.

Samuel M. Dow, M.D., Cleveland; Johns Hopkins University, licensed 1896; aged 84; died April 13. Dr. Dow practiced in Cleveland for over 50 years. He had also practiced in Detroit for several years. A son survives.

Samuel William Evans, M.D., Cleveland; Western Reserve University School of Medicine, 1895; aged 64; member of the Ohio State Medical Association and the American Medical Association; died March 14. Dr. Evans practiced in Cleveland for nearly 40 years. During the World War, he was a captain of the Medical Corps of the U. S. Army. He was a member of the I.O.O.F. and the Masonic Order. Surviving are his widow and a son.

Winfield Scott Gehrett, M.D., Deshler; Western Reserve University School of Medicine, 1919; aged 44; former member of the Ohio State Medical Association and the American Medical Association; died April 5. A member of the Board of Health of Henry County, Dr. Gehrett practiced in that community for 18 years. He was a member of the American Legion and the Masonic Order. His widow and his mother survive.

Emery Milton Goodwin, M.D., East Cleveland; Western Reserve University School of Medicine, 1895; aged 70; former member of the Ohio State Medical Association and the American Medical Association; died March 23. Dr. Goodwin practiced in Glenville and East Cleveland for 33 years. He had been in poor health for the past two years. One of the founders of Provident Hospital, he had been chief of staff of that institution. Dr. Goodwin was a charter member of the Cleveland Club and the Glenville chapter of the Masonic Order; a deacon of the Glenville Presbyterian Church and a member of the Cleveland Chamber of Commerce. Surviving are a daughter, two sons, a brother and three sisters.

C. F. Guthrie, M.D., Alfred; College of Medicine and Surgery, Ph.M., Chicago, 1895; aged 79; died March 10. Dr. Guthrie had practiced in Alfred and Meigs County for many years. His widow, a son, a daughter and a brother survive.

John Andrew Heinlein, M.D., Bridgeport; Jefferson Medical College of Philadelphia, 1886; aged 76; former member of the Ohio State Medical Association and the American Medical Association; died March 10. Dr. Heinlein retired because of ill health about 25 years ago, after having practiced actively in Bridgeport for 25 years. His early practice was as a physician in the Ohio State Penitentiary. After his return to Bridgeport, he became health officer and a member of the school board. From 1898 to 1907 he was postmaster of Bridgeport. Dr. Heinlein was the last suriving charter member of the Ohio State chapter of the Chi Phi fraternity. He was also an original member of the Ohio Society for the Prevention of Tuberculosis. Dr. Heinlein was a member of the Presbyterian Church and the

Masonic Order. His widow, a daughter and two brothers survive.

Thomas Linley, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1896; aged 65; died April 6. A native of England, Dr. Linley practiced in Cleveland for 42 years. He was a member of the Maccabees and Odd Fellows. Surviving are his widow and a brother.

Miron I. Marsh, M.D., Cedarville; Medical College of Ohio, Cincinnati, 1895; aged 73; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 21. Dr. Marsh retired because of ill health three years ago, after having practiced in Cedarville for 40 years. Vice-president of the Board of Trustees of Cedarville College, he had been a member of the Board for 17 years. Dr. Marsh had served as president and also secretary of the Greene County Medical Society. He was a member of the United Presbyterian Church. His widow survives.

Dallas McKeever Murphy, M.D., Bethesda; Starling Medical College, Columbus, 1898; aged 65; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 4. Dr. Murphy had been active professionally and in community affairs in Bethesda and Belmont County for 40 years. He was a member of the Methodist Church and the Masonic Order. Surviving are his widow, a daughter and three brothers.

George Corlett Radcliffe, M.D., Peninsula; Cleveland-Pulte Medical College, (Homeopathic), 1898; Cleveland College of Physicians, 1901; aged 64; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 22. Dr. Radcliffe practiced in Summit County for 32 years. His widow and three sisters survive.

John Rauschkolb, M.D., Columbus;; Starling Medical College, Columbus, 1898; aged 79; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 20. Recipient of one of the first pharmacy certificates issued by Ohio State University, Dr. Rauschkolb spent almost 20 years of life in that field. He also practiced medicine for 40 years in Columbus. Dr. Rauschkolb was a member of the Masonic Order, I.O.O.F., Independent Protestant Church, and Boy Scouts of America Council, and former president of the Columbus Academy of Medicine.

Surviving are his widow, a daughter, and two sons, one of whom is Dr. John E. Rauschkolb, Cleveland.

Garfield R. Salsberry, M.D., Lyons; Wayne University College of Medicine, Detroit, Mich., 1903; aged 58; member of the Ohio State Medical Association and the American Medical Association; died March 25. A native of Fulton County, Dr. Salsberry had practiced in Lyons for 25 years. He was a member of the County Board of Education and the Masonic Order. His widow survives.

William E. Sampliner, M.D., Cleveland; Western Reserve University School of Medicine, 1903; aged 56; former member of the Ohio State Medical Association and the American Medical Association; died April 15. Dr. Sampliner practiced in Cleveland for 33 years. A daughter, two brothers and a sister survive.

Daniel Gilmore Simpson, M.D., Warren; University of Illinois College of Medicine, Chicago, 1898; aged 67; member of the Ohio State Medical Association, the American Medical Association and the Radiological Society of North America; died April 14 Dr. Simpson was president of the staff of St. Joseph's Riverside Hospital. He had practiced in Warren for 40 years. For several years, Dr. Simpson was a major in the Ohio National Guard. His widow survives.

Lewis Martin Tinker, M.D., Frankfort; Bellevue Hospital Medical College, New York, 1894; aged 69; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 16. Dr. Tinker practiced in Clarksburg for 11 years and in Frankfort for 32 years. During the World War, he was a captain in the U. S. Army Medical Corps. Dr. Tinker was a past master of the Masonic Order, past commander of the local post of the American Legion and a member of the Presbyterian Church. Surviving are his widow, a son, a daughter and a brother.

Cooley Baldwin Van Meter, M.D., Cincinnati; Miami Medical College, Cincinnati, 1887; aged 76; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 17. Dr. Van Meter retired last year after having practiced in Cincinnati for 50 years. For the last 20 years he was examining alienist for the Hamilton County Probate Court. Dr. Van Meter was a member of the Masonic Order. Surviving are his widow, two sisters and a brother.

James Arnot Walker, M.D., Youngstown; Jefferson Medical College of Philadelphia, 1918; aged 50; member of the Ohio State Medical Association and the American Medical Association; died April 7. Dr. Walker practiced in Youngstown for 20 years. He was much interested in the Youngstown Fresh Air Camp for poor children, an organization which he served gratuitously. Dr. Walker was a member of the Masonic Order and the Presbyterian Church. A brother and an aunt survive.

BUCKEYE NEWS NOTES

Ada—Socialized medicine as practiced in European countries would not be practical in the United States, Dr. J. H. J. Upham, Columbus, President of the American Medical Association, told members of the local Rotary Club at a recent meeting. He was introduced by Dr. Don R. Printz.

Akron—Officers of the local Eye, Ear, Nose and Throat Academy for the ensuing year are: Dr. L. E. Brown, president; Dr. L. A. Witzeman, vice-president, and Dr. C. R. Anderson, secretary-treasurer.

Alliance—Dr. Perry F. King spoke on "Cancer" at a recent meeting of the Mount Union College chapter of Phi Sigma, honorary biology fraternity.

Bluffton—Staff officers of the Community Hospital are: Dr. W. C. Laycock, Beaverdam, president; Dr. H. A. Neiswander, Pandora, vice-president, and Dr. B. W. Travis, Bluffton, secretary.

Bowling Green—At a recent meeting of the local Kiwanis Club, four members spoke for their respecting professions in a symposium on "The Ethics of the Medical, Dental, Teaching and Legal Professions". The medical profession was represented by Dr. R. N. Whitehead, secretary of the Wood County Medical Society.

Caldwell—The possibility of establishing a community hospital, and reviving the Noble County Medical Society was discussed at a recent meeting of local physicians.

Cambridge—Dr. George F. Swan, president of the local Kiwanis Club, was recently elected president of the Chamber of Commerce.

Cincinnati—Dr. Burr N. Carter spoke on "Surgical Treatment of Chronic Empyema", at a meeting of the Fifth District Medical Society, Atlanta, Ga., March 31.

Cleveland—Kurt H. Thomas, D.M.D., Charles Albert Brackett Professor of Oral Pathology, Harvard University School of Medicine, Boston, Mass., gave the Frank E. Bunts Lecture at the Cleveland Clinic, April 4. His subject was: "Tumors of the Jaws—Classification, Histologic and Roentgen Findings".

Columbus—As a memorial to his father, Robert A. Doan, Dr. Charles A. Doan, professor of medicine, Ohio State University College of Medicine, has established a four-year scholarship at Hiram College.

Dayton—A series of educational health broadcasts is being presented by the Montgomery County Medical Society every Wednesday morning at 10:30 o'clock over station WHIO.

Dennison—Dr. Alvin Greenlee spoke on "Socialized Medicine" at a recent meeting of the Rotary Club.

Findlay—A bequest of over $17,000 was made to Findlay Hospital in the will of the late Lillie A. Clason.

Ironton—Dr. O. H. Henninger has been named a trustee of General Hospital.

Massillon—Dr. J. A. Carnes spoke on "Fractures" at a recent meeting of the Orrville Rotary Club.

New Philadelphia—Dr. E. D. Moore recently completed his 50th year as a practicing physician.

Norwalk—Memorial Hospital was the principal beneficiary in the will of the late Charles A. Paul, local banker. The bequest amounted to $10,000.

Pickerington—Dr. W. B. Taylor was guest speaker at a recent meeting of the Carroll P.T.A.

Piqua—Dr. John J. Kearney discussed the subject "Social Diseases" at a recent meeting of the Kiwanis Club.

Sidney—A $20,000 gift from Mrs. Ida M. Key, in memory of her husband, Sherman Key, was recently announced by the Board of Trustees of Wilson Memorial Hospital. The money will be used to construct a wing on the present structure, to be known as "Key Memorial".

Springfield—Dr. Frank C. Andrus, Columbus, has been appointed pathologist at City Hospital.

Toledo—A solution of the problem of the cost of illness through evolution, not revolution, was urged by Dr. J. H. J. Upham, Columbus, President of the American Medical Association, in an address before the local Lions Club recently. Dr. Upham was introduced by Dr. Barney J. Hein, President-Elect of the Ohio State Medical Association.

Troy—While wintering in Miami, Florida, Dr. Warren Coleman recently celebrated the 50th anniversary of his entrance into the practice of medicine.

Wapakoneta—Dr. John LoCricchio, pathologist for Lima Memorial and St. Rita's Hospitals, was the speaker at a recent meeting of the Rotary Club.

Willoughby—Dr. Thomas H. Moore has just completed his 60th year as a practicing physician in this community.

Yorkshire—The 50th anniversary of his graduation from the Medical College of Ohio, Cincinnati, was recently celebrated by Dr. E. A. Fisher.

HOBBY EXHIBIT ENTRY BLANK

The exhibition of "extra-curricular" activities at Dayton last year was so successful that more room has been assigned to hobbyists for the 1938 Ohio State Medical Association Annual Meeting, May 11 and 12, Neil House, Columbus. Three large rooms on the Mezzanine Floor of the Neil House will house the displays.

Arts and crafts always seem to top the entry list. Last year handmade Christmas cards, gun stocks, engine models, ship models, inlaid tables, glassware, paintings, etchings, photographs, and Indian relics were exhibited. This year we hope to branch out with a more varied and complete assortment. It doesn't matter to us **what** your hobby is as long as you **have** one. Bring along your "brain child" to show your fellow physicians from all over the state.

An entry blank is provided below. Fill it out and mail to the committee as soon as possible. We must know how to plan and arrange for the best possible display of individual exhibits.

Dr. Paul W. Palmer, Chairman,
Committee on Hobby Exhibits,
115 S. Grant Avenue,
Columbus, Ohio.

Please enter the following for exhibition at 1938 Annual Meeting, May 11-12:

Title and description _____

_____

I should have _____ sq. feet wall space ☐ floor space ☐ (check which).

Material will be best displayed on the wall ☐ table ☐ shelf ☐ showcase ☐. (Check).

Signed _____, M.D.

Address _____

_____

Try to have all exhibits delivered to the committee on Mezzanine Floor of the Neil House by Tuesday evening, May 10. The committee reserves full authority to accept or reject any Exhibit. Space will be assigned in the order blanks are received.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: PARKE G. SMITH, M.D., CINCINNATI)

ADAMS

An all-day meeting of the Adams County Medical Society was held at the Hotel Hester, Manchester, Wednesday, April 27. In the morning, following a business session, Dr. J. M. Brooke, Peebles, spoke on "Glass Fitting". His paper was discussed by Dr. L. H. Leonard, Manchester. Dr. A. W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, gave an address on "Problems in Pediatrics". Dr. Hazel Sproull, West Union, discussed the subject. Dr. O. T. Sproull, West Union, explained the Aid to Dependent Children program.—O. T. Sproull, M.D., secretary.

BUTLER

"Cholelithiasis and Cholecystitis", was the subject presented at a meeting of the Butler County Medical Society, Thursday afternoon, March 10, at Mercy Hospital, Hamilton. Dr. Malcolm O. Cook spoke on surgery, Dr. Harry M. E. Lowell, X-ray, and Dr. F. E. Ullrey, medicine. General discussion was led by Dr. D. M. Skinner and Dr. John F. Borelli.—News clipping.

CLINTON

Dr. C. G. Foor, Hillsboro, was guest speaker at a meeting of the Clinton County Medical Society, at Wilmington, Tuesday, April 5. His very comprehensive presentation of "Thyroid Diseases", and the subsequent discussion made it one of our outstanding meetings.—Elizabeth Shrieves, M.D., correspondent for *The Journal.*

HAMILTON

The following programs were presented by the Academy of Medicine of Cincinnati during April:

April 5—"Some Etiological Considerations of Carcinoma of the Large Bowel", by Dr. Vernon C. David, Chicago, Ill., professor of clinical surgery, Rush Medical College.

April 12—"The Surgical Treatment of Chronic Constrictive Pericarditis", by Dr. George Heuer, New York City, professor of surgery, Cornell University Medical College.

April 19—"Diabetes Mellitus", by Dr. Edward S. Dillon, Philadelphia, assistant professor of diseases of metabolism, University of Pennsylvania Graduate School of Medicine. This meeting was held under the auspices of the Council on Diabetes of the Public Health Federation.

April 26—"Induced Malaria Termination With Sulfanilamide—A Report of Three Cases", by Dr. Jules Gelperin and Dr. G. S. Ingalls; "Studies in Syphilis. The Use of the Statistical Method", by Dr. Samuel Goldblatt.—Bulletin.

HIGHLAND

Dr. Leon Goldman, Cincinnati, spoke on "Common Diseases of the Aged", at a meeting of the Highland County Medical Society, Wednesday noon, April 6, at Hotel Parker, Hillsboro.—News clipping.

WARREN

Dr. Marion Coleman, Dayton, was the guest speaker at a meeting of the Warren County Medical Society at the Town Hall, Lebanon, Tuesday afternoon, April 5.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

CLARK

Dr. Thomas E. Jones, Cleveland, spoke on "The Diagnosis and Treatment of the Commoner Diseases of the Colon and Rectum", at a meeting of the Clark County Medical Society, Thursday evening, March 24, at Hotel Shawnee, Springfield. —News clipping.

DARKE

Members of the Darke County Medical Society were hosts to physicians in surrounding counties, at the Christian Church, Greenville, Friday, April 15, when a refresher course in pediatrics was presented by the Bureau of Child Hygiene, State Department of Health. Dr. Robert A. Lyon, assistant professor of pediatrics, University of Cincinnati College of Medicine, spoke on "Nutrititonal Disturbances of a Child of Preschool Age", and "Gastro-Enteritis in Infancy".—W. D. Bishop, M.D., secretary.

MIAMI

The four youngest members of the Miami County Medical Society were assigned the following subjects for 15 minute papers at a meeting of the society, Friday afternoon, April 8, at Stouder Hospital, Troy: "Sulfanilamide", Dr. J. J. Kearney, Piqua; "1937 Advances in Surgery", Dr. R. H. Wehr, Covington; "1937 Advances in Medicine", Dr. Paul E. Foy, Troy, and "1937 Advances in Pediatrics and Obstetrics", Dr. H. S. Elliott, Pleasant Hill.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

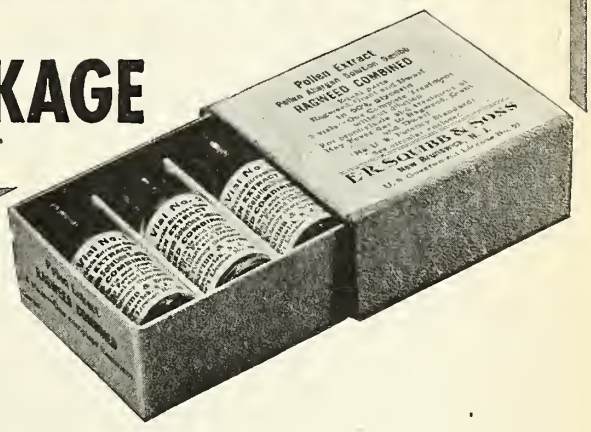
Dr. Harold H. Reineke, Cincinnati, spoke on "X-ray Studies on Differential Diagnosis of Tuberculosis", at a meeting of the Montgomery County Medical Society, Friday evening, April 1, at Dayton.

The following program was presented at the

3 Distinct Advantages

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THREE-VIAL PACKAGE



For the prophylaxis of Spring hay fever caused by grass pollens, the physician will find the 3-vial package—"Grasses Combined" Pollen Extract Squibb—a very desirable preparation.

IT IS CONVENIENT—no diluting nor mixing—just withdraw the required dosage from the vial and inject.

IT IS ECONOMICAL—there is enough solution in the 3-vial package for 19 doses for one patient—and it costs the physician only six dollars.

IT PERMITS FLEXIBILITY—which enables the physician to adjust the dosage in accordance with the patient's requirements.

The 3-vial package—"Grasses Combined"—supplies a total of 39,000 protein nitrogen units and contains equal parts of extracts from the pollens of Bermuda grass, June grass, orchard grass, red top, and timothy.

"Grasses Combined" Pollen Extracts Squibb are also available in 5-cc. vials and 15-dose Treatment Sets. The 5-cc. vials of "Grasses Combined" or of the individual extracts can be used with the Squibb Special Diluent Package (50% sterile glycerin solution) to prepare simple and stable solutions of pollen extracts as needed. A large assortment of Diagnostic Pollen Extracts is supplied in capillary tubes for skin-test purposes.

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society's meeting, Friday evening, April 15: "Advances in Obstetrics in 1937", by Dr. A. Hirsheimer, with Dr. J. K. Hoerner, discussant; "Advances in Gynecology in 1937", by Dr. P. K. Champion, with Dr. H. H. Wagner, discussant.—Mildred E. Jeffrey, executive secretary.

PREBLE

"Arthritis" was the subject discussed by Dr. T. E. Newell, Dayton, at a meeting of the Preble County Medical Society, Wednesday, March 23, at Eaton.—News clipping.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

AUGLAIZE

An attractive double-header program was presented to the Auglaize County Medical Society at its meeting at St. Mary's, Thursday evening, April 7. Dr. D. W. English, Lima, spoke on "Roentgen Consideration of the More Common Gastro-Intestinal Diseases. Dr. Howard F. Webb, Lima, showed colored motion pictures in his talk on "Western Wander Lands".—C. C. Berlin, M.D., secretary.

HANCOCK

Dr. Henry Field, Jr., professor of internal medicine, University of Michigan Medical School, Ann Arbor, Mich., spoke on "Peptic Ulcer", at a meeting of the Hancock County Medical Society, Thursday evening, March 10, at the Elks' Club, Findlay.—News clipping.

HARDIN

"Syphilis and Its Treatment", was the subject of an address by Dr. P. L. Harris, assistant chief, Bureau of Venereal Diseases, State Department of Health, at a meeting of the Hardin County Medical Society, Thursday evening, March 24, at Kenton.—News clipping.

MARION

At a meeting of the Marion Academy of Medicine, Tuesday evening, March 1, at Marion City Hospital, Dr. Karl D. Figley, Toledo, spoke on "The Management of Pollen Hay Fever and Asthma".

Dr. John W. Holloway, Cleveland, associate professor of surgery, Western Reserve University School of Medicine, discussed "Regional Ileitis", at a meeting of the Academy, Tuesday evening, April 5.—R. G. McMurray, M.D., secretary.

MERCER

Dr. Charles H. Leech, Lima, was guest speaker at a meeting of the Mercer County Medical Society, Thursday evening, March 24, at Celina.—News clipping.

SENECA

A program on "Syphilis", arranged through the State Department of Health, was presented at a meeting of the Seneca County Medical Society, Thursday evening, April 14, at the Shawhan Hotel, Tiffin.—Edmund F. Ley, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

FULTON

The following programs were presented by the Fulton County Medical Society during March and April, at DeEtte Harrison Detwiler Memorial Hospital, Wauseon:

March 4—"Pleural Effusions", by Dr. E. C. Raabe, Morenci, Mich.; "Treatment of Pleural Effusions", by Dr. C. L. Hutchins, Delta.

March 24—Institute Meeting. A morning clinic was conducted by Dr. Henry K. Ransom and Dr. Norman F. Kretschmar, University of Michigan Medical School, Ann Arbor, Mich. Following luncheon at the hospital, Dr. Ransom spoke on "The Acute Abdomen", and Dr. Kretzschmar discussed "Gynecologic Endocrinology".

April 7—"Early Syphilis", by Dr. T. L. Taylor, Toledo; "Late Syphilis", by Dr. H. J. Luxan, Montpelier. Motion picture "Diagnosis and Treatment of Syphilis", through courtesy of State Department of Health.

April 22—Refresher course in pediatrics, under auspices of Bureau of Child Hygiene, State Department of Health. Dr. Sterling B. Ashmun, Dayton, spoke on "Infectious Diseases and Prophylaxis".—R. E. Merrill, M.D., secretary of staff, DeEtte Harrison Detwiler Memorial Hospital.

LUCAS

The following programs were presented by the Toledo Academy of Medicine during April.

April 1—General Meeting of the Academy. "Lesions of the Cervix", with colored lantern slides and demonstration of photography, by Dr. Charles E. Galloway, assistant professor of Obstetrics and Gynecology, Northwestern University Medical School, Chicago, Ill.

April 8—Section of Pathology, Experimental Medicine and Bacteriology. "The Clinical Significance of Recent Work on Atelectasis", with lantern slide demonstration, by Dr. E. G. Galbraith and Dr. Bernhard Steinberg.

April 15—Medical Section. "Practical Points in the Diagnosis and Treatment of the Patient with Nervous and Functional Digestive Disturbance", by Dr. C. L. Hartsock, Cleveland.

April 29—General Meeting of the Academy. "Pregnancy and Heart Disease, Surgery and Heart Disease, Diagnosis and Treatment of Arrhythmias", by Dr. Wilhelm Dressler, Vienna, Austria. This was the closing lecture of a postgraduate course in "Diseases of the Heart", by Dr. Dressler.—Bulletin.

PUTNAM

Dr. James M. McBride, Lima, spoke on "The Treatment of Head Injuries", at a meeting of

BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

III. EXHAUSTING OR PREHEATING

● Modern canning procedures provide for the exclusion from the sealed container of air, and other gases present in raw food material, to the greatest possible degree.

In the sealed can, oxygen, in particular, is undesirable, whether it be released from food cells or be present in the form of entrapped air. If present in the sealed tin container, oxygen can react with the food and the interior of the can and directly affect the quality, nutritive value and merchantable life of the canned food. Other gases—for example, carbon dioxide produced by cellular respiration—should also be excluded as far as is practical. If present in large amounts, these gases may place undue strain on the container during the heat process to which canned foods are subjected.

In commercial canning practice, certain operations—specifically the blanch—may aid in elimination of gases from raw food tissues. However, main dependence is placed upon what are known as "exhausting" or "preheating" operations, not only to expel gases from raw foods, but also to exclude air from the can.

Briefly, the exhausting operation is accomplished by mechanically passing the open can containing the raw food through a so-called "exhaust box" in which hot water or steam is used to expand the food by heat and drive out air and other gases contained in the food and in the can. The times and temperatures used in commercial exhausting operations will naturally vary with the nature of the product (1).

After exhausting, the can is immediately permanently sealed, heat processed and cooled. During cooling, the contraction of the heated contents of the can creates the vacuum normally present in commercially canned foods.

With certain products, instead of exhausting as described above, the same effect is produced by preheating the food in kettles or similar devices; filling into the cans while still hot; and immediately sealing the containers. With still other products, an exhausting effect is produced by adding boiling water, syrup or brines to the food in the can. In some instances, exhausting is accomplished by mechanical rather than by thermal means. Specially designed sealing or "closing" machines are used to withdraw air and other gases by applying high vacuum to the can and immediately sealing on the cover.

Such in brief are the purposes of commercial exhausting operations and the means by which they are usually accomplished. Modern canners recognize that these operations are most important to the success of their canning procedures. They appreciate that only by strict supervision and control of exhausting operations can the quality and nutritive values of their products be maintained at a consistently high level.

AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

(1) Appertizing or The Art of Canning", A. W. Bitting, The Trade Pressroom, San Francisco, 1937.

This is the thirty-sixth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

the Putnam County Medical Society, Tuesday evening March 1, at DuMont Hotel, Ottawa.—R. L. Tecklenberg, M.D., correspondent for *The Journal*.

SANDUSKY

The motion picture "Syphilis", prepared by the American Medical Association and the U. S. Public Health Service, was presented by Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, at a meeting of the Sandusky County Medical Society, Thursday evening, March 31, at the Old Elm Tea Room, Fremont.—T. R. Cunningham, M.D., secretary.

Fifth District

(COUNCILOR: H. V. PARYZEK, M.D., CLEVELAND)

ASHTABULA

Dr. D. K. Kitchen, Detroit, Mich., spoke on "Advances of Endocrine Researches and Therapy", at a meeting of the Ashtabula County Medical Society, at Hotel Ashtabula, Ashtabula, Tuesday, March 8.—A. A. DeCato, M.D., secretary.

CUYAHOGA

Cleveland Academy of Medicine presented the following programs during April:

April 1—Clinical and Pathological Section. "Introduction", by Dr. L. A. Pomeroy; "Primary Cancer of the Lung", by Dr. E. P. McNamee; "Carcinoma of the Large Bowel", by Dr. T. E. Jones; "Plastic Surgery in Relation to Malignancy", by Dr. D. M. Glover; "Diagnosis and Treatment of Skin Malignancy", by Dr. C. L. Cummer.

April 8—Joint Meeting, Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "Some Observations Concerning the Mechanism of Carbohydrate Metabolism in the Chick Embryo", by A. J. Dalton, Ph.D., and Dr. R. F. Hanzal, Ph.D.; "The Effects of Cardiac Vein Occlusion on the Coronary Circulation", by Dr. D. E. Gregg, Ph.D., and D. W. Dewald, A.B.; "Autonomic Activity Associated with 'Voluntary Control of the Mm. Arrectores Pilorum' ", by D. B. Lindsley, Ph.D., and W. H. Sassaman, M.A.; "Therapeutic Metrazol Convulsions", illustrated by color cinema, by Dr. G. H. Williams, Jr.

April 11—Pediatric Section. "Review of Deaths from Scarlet Fever at Cleveland City Hospital, 1931-1938", by Dr. Frederick W. Rea; "Results of Endocrine Treatment of Cryptorchidism", by Dr. Carl E. Zeithaml; "Treatment of Scarlet Fever by the Newer Concentrated and Refined Antitoxins", by Dr. John A. Toomey and Dr. Conrad Baker.

April 15—Regular Academy Meeting. "Surgery of the Spleen", by Dr. Allen O. Whipple, New York, professor of surgery, Columbia University College of Physicians and Surgeons.

April 20—Industrial Medicine and Orthodepic Section. "Silicosis", by Dr. R. C. McKay; "Encephalography as an Aid to Diagnosis in Obscure Cranial Lesions", by Dr. Roy J. Secrest, assistant supervisor, medical section, State Industrial Commission. "The Relationship of Workmen's Compensation and State Medicine", by Dr. Sidney McCurdy, supervisor, Medical Section, State Industrial Commission.

April 26—Military Section.—"Use of Chemicals in Warfare", by Lt. Commander Julius Neuberger, M.D.—Bulletin.

LORAIN

Dr. Robert F. Dinsmore, Cleveland, spoke on "Gall Bladder Problems", at a meeting of the Lorain County Medical Society, Tuesday evening, April 12, at Hotel Greystone, Elyria.—L. H. Trufant, M.D., secretary.

Sixth District

(COUNCILOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

ASHLAND

On Wednesday evening, March 23, the Ashland County Medical Society held its monthly dinner meeting at the Hotel Otter, Ashland. Dr. Harold N. Cole, Cleveland, spoke on "Syphilis", with special reference to recurrences, and syphilis of the cerebro-spinal nervous system. The paper was fully discussed by the members present.

Dr. W. T. Ewing, D.D.S., Akron, addressed a joint meeting of the society and the Ashland Dental Society, April 8, on "Fractures of the Jaws". The importance of immediate attention to these fractures and some of the newer methods of treatment were discussed. Twenty-four local physicians and dentists attended the meeting. The guests were: Dr. Fowler Roberts, Dr. Paul C. Langan and Dr. Edward Voke, all of Akron. The next meeting of the society is scheduled for May 13, when Dr. Harry E. LeFever, Columbus, will speak on "Acute Craniocerebral Injuries and Their Management".—M. D. Shilling, M.D., secretary.

HOLMES

Dr. John E. Rauschkolb, Cleveland, assistant profesor of dermatology, Western Reserve University School of Medicine, spoke on "Diagnosis and Treatment of Early Syphilis", at a meeting of the Holmes County Medical Society, Thursday evening, March 10, at Pomerene Memorial Hospital, Millersburg.—News clipping.

PORTAGE

"Fractures of the Upper Extremity" was the subject discussed by Dr. Harold R. Conn, Akron, at a meeting of the Portage County Medical Society, Thursday evening, April 7, at the home of Dr. J. M. Painter, Kent. Sixth District Councilor Dr. Wm. M. Skipp, Youngstown, spoke on state

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and county organization matters of general interest.—E. J. Widdecombe, M.D., secretary.

STARK

Dr. Granville S. Hanes, Louisville, Ky., professor of surgery, University of Louisville School of Medicine, was guest speaker at a meeting of the Stark County Medical Society, Tuesday evening, April 12, at St. Paul's Episcopal Church, Canton. His topic was "General Discussion of the Most Important Diseases Affecting the Lower Bowel".—Clair B. King, M.D., secretary.

SUMMIT

"Allergy in General Medicine", was the subject presented by Dr. L. E. Prickman, Rochester, Minn., associate professor of medicine, University of Minnesota Graduate Medical School, at a meeting of the Summit County Medical Society, Tuesday, April 5, at the Mayflower Hotel, Akron.—Bulletin.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

BELMONT

Dr. C. C. Sherburne, Columbus, spoke on "Treatment of Pneumonia", at a meeting of the Belmont County Medical Society, at Kilkenny Inn, Bellaire, Thursday afternoon, April 7.—C. W. Kirkland, M.D., secretary.

COLUMBIANA

At a meeting of the Columbiana County Medical Society, Tuesday night, March 8, at the Legion Home, Lisbon, Dr. John A. Fraser, East Liverpool, discussed, "Analgesia and Anesthesia in Obstetrics".—News clipping.

TUSCARAWAS

Dr. F. E. Schmidt, Chicago, talked on "The Diagnosis and Treatment of Pneumonia", at a meeting of the Tuscarawas County Medical Society, Thursday evening, March 24, at the Reeves Hotel, New Philadelphia.—News clipping.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

GUERNSEY

A symposium was presented by four members of the staff of the medical section of the State Industrial Commission at a meeting of the Guernsey County Medical Society, Thursday noon, March 17, at the Berwick Hotel, Cambridge. Dr. Sidney McCurdy spoke on "Relationship of Workmen's Compensation to State Medicine"; Dr. R. J. Secrest discussed "Head Injuries". "Arthritis Resulting From Injury", was Dr. Henry P. Worstell's topic. Dr. Maurice B. Rusoff spoke on "Estimation of Disability From Accident". Dr.

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E. R. Brush, Zanesville, was a guest at the meeting.—News clipping.

LICKING

Dr. E. J. Teeter, of Eli Lilly & Company, spoke on "The Anemias and Liver Extract", at a meeting of the Licking County Medical Society, Tuesday, March 29, at Newark.—Paul C. Grove, M.D., correspondent for *The Journal*.

MUSKINGUM

Members of the Muskingum County Academy of Medicine were hosts to physicians of surrounding counties, Wednesday, March 2, at Zanesville, when a refresher course in pediatrics was presented by the Bureau of Child Hygiene, State Department of Health. Speakers were Dr. Henry Lynde Woodward, professor of obstetrics, University of Cincinnati College of Medicine, and Dr. Geneva L. Shong-Rothemond, pediatrician in the Bureau of Child Hygiene.

Dr. P. Wm. Haake was the speaker at a meeting of the Academy, Wednesday evening, April 6, at the University Club, Zanesville. His paper was a general discussion of fractures and their managements, including the Smith-Peterson internal fixation of fractures of the neck of the femur.—Beatrice T. Hagen, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

SCIOTO

"Pyelitis in Children and in Pregnancy", was the subject presented by Dr. John E. Hoberg, Columbus, at a meeting of the Hempstead Academy of Medicine of Scioto County, Monday evening, April 11, at the General Hospital, Portsmouth.—W. M. Singleton, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

CRAWFORD

Dr. Wayne Brehm, Columbus, spoke on "Modern Obstetrics" at a meeting of the Crawford County Medical Society, Monday, April 4, at Bucyrus.

FRANKLIN

The Columbus Academy of Medicine presented the following programs during April:

April 4—"Prevention of Uterine Cancer", by Dr. P. Brooke Bland, Philadelphia, former professor of obstetrics, Jefferson Medical College.

April 18—"Medicine and Art", by Philip Adams, director, Columbus Art Gallery. "The Physician and Literature", by Dr. Leslie L. Bigelow.

April 25—Section in General Medicine. This meeting was held at the plant of M. & R. Dietetic Laboratories. Following a tour of the plant, James E. Wheeler spoke on the topic "Believe It

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or Not", and Dr. Marion L. Ainsworth, discussed "Advantages and Disadvantages of Breast and Artificial Feeding".—Bulletin.

PICKAWAY

Dr. Robert C. Kirk, Columbus, spoke on "Serum Treatment of Pneumonia", at a meeting of the Pickaway County Medical Society, Friday noon, March 11, at Circleville. Dr. C. C. Sherburne, Columbus, Tenth District Councilor, was a guest at the meeting.—News clipping.

Dr. George I. Nelson, Columbus, discussed "Clinical Use of Digitalis", at a meeting of the society, Friday, April 1, at Circleville.—News clipping.

Ohioans Pay Until It Hurts, Report of Tax Service Reveals

A summary that Ohio citizens paid $756,229,000 in Federal, state and local taxes during 1937 was contained in a recent issue of *Tax Facts*, a monthly bulletin prepared by the municipal research bureau of the Cleveland Chamber of Commerce.

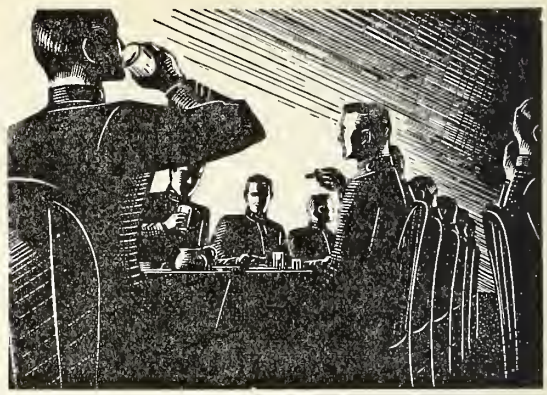
The Federal Government received $269,161,000, or $40.50 per capita; the state government received $267,068,000 or $40.18 per capita, and local taxing districts, $220,000,000, or $33.10 per capita, according to the bulletin.

Tax sources, in order of revenue derived, were reported as follows:

Real estate and tangible taxes	$202,000,000
Income and intangible taxes	132,211,000
Auto, gas and oil taxes	110,519,000
Social security and compensation	90,885,000
Liquor taxes	63,836,000
Sales and use taxes	50,901,000
Capital stock and franchise taxes	19,398,000
Estate and gift taxes	17,225,000
Tobacco tax	16,878,000
Process and manufacturing excise tax	14,744,000
Public utility taxes	14,324,000
Miscellaneous taxes and fees	10,128,000
Luxury taxes	9,090,000
Stamp taxes (documentary and playing cards)	4,090,000

New Executive Secretary at Toledo

Succeeding Henry C. Gerber, Jr., who has been named executive secretary of the Michigan State Dental Society, George W. Cooley was appointed executive secretary of the Toledo Academy of Medicine, effective April 1. Mr. Cooley is a graduate of the University of Cincinnati and later of the Graduate School of Public Administration. He has had experience in executive secretarial work and journalism with the Cincinnati Regional Crime Committee and as a consultant with the National Municipal League in a comprehensive survey of the governments of Atlanta, and Fulton County, Ga.

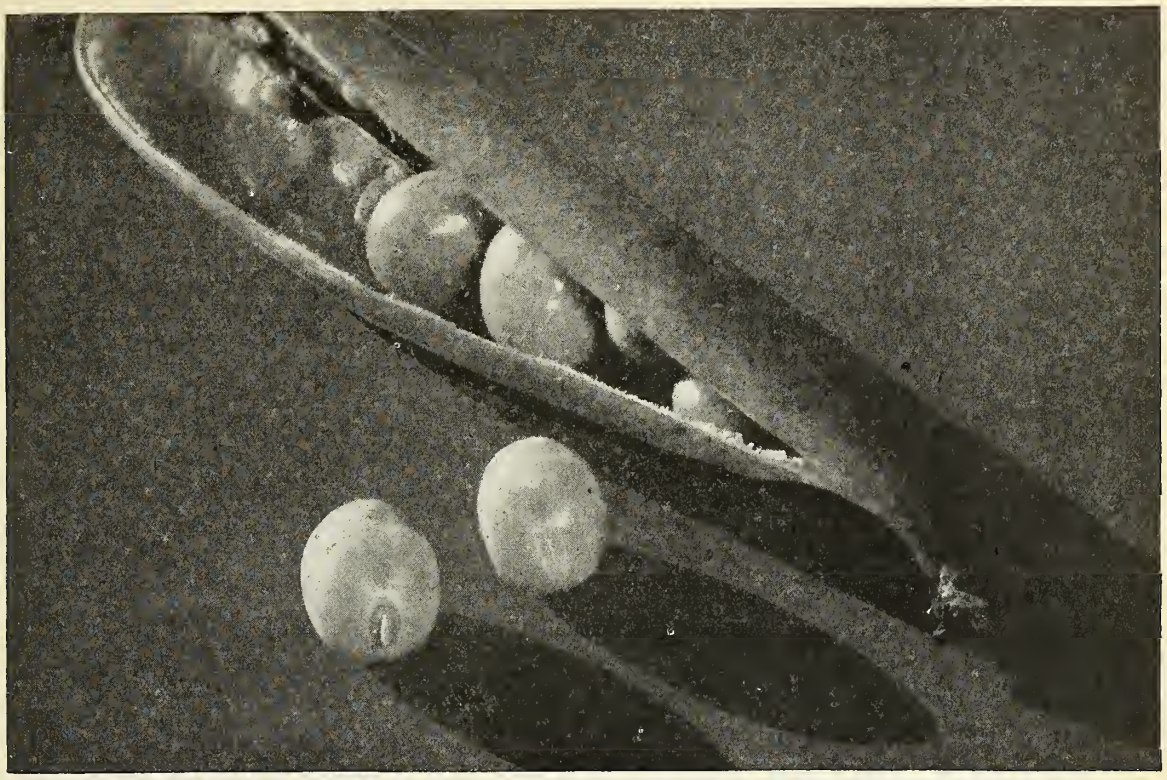


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THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

The Fight for Life. By Paul deKruif. $3.00. Harcourt, Brace and Company, New York, 1938; pp. 342.

The author has rewritten the essays which appeared during the last six years in the Country Gentleman and the Ladies Home Journal around the central theme that the death fight has become the whole peoples fight for life in contradistinction to individualist work of "the microbe hunters". Public health authorities have emphasized the lag of 30 years or more from the establishment of a fact in science and the development of a popular understanding that will put that new fact to work, but no one has done much about it until deKruif worked his impassioned emotions up to the point where they boiled over in dramatic indignation which started things being done about it.

The Roentgenologist In Court. By Samuel W. Donaldson, A.B., M.D., F.A.C.R., Ann Arbor, Michigan. $4.00. C. C. Thomas, Springfield, Illinois, and Baltimore, Md., 1937; pp. 230.

From a wide personal experience and much legal research, the author has produced a book which will be helpful to all of us who read it. How lawsuits start. How to avoid them, and treating at length the difference in the laws of the various states. And since any of us may at any time be forced to testify in court, this volume should be read to learn of the physician's rights as a witness.

Working Wives. By Janet Fowler Nelson. 35 cents. The Woman's Press, 1937; pp. 48.

A study book from the education for marriage series. As such it points out effectively the points in favor of working and not working after marriage in a way that should be helped to any woman to whom this personal problem is pressing or is about to become so.

Atlas of Skeletal Maturation. By T. Wingate Todd, M.B., Ch.B. Henry Willson Payne professor of anatomy in the Western Reserve University. C. V. Mosby and Company, St. Louis, 1937; pp. 201.

A series of X-ray photographs establishing standards of maturation in the various age groups. This volume together with all the other studies on the subject of growth and nutrition done by Dr. Todd and his colleagues, working under the Associated Foundations of the laboratory of anatomy belong on the "must list" of every pediatrician, endocrinologist, allergist, and all who are interested in the subject of maturation.

The Measurement of Outcomes of Physical Education for College Women. By Elizabeth Graybeal, director of physical education for women, State Teachers College, Duluth, Minn. $1.00. University of Minnesota Press, 1937; paper; pp. 80.

Stripped of its technical details, this report of study seems to show that substantial improvement may be expected from required physical education courses in attitudes toward, and information concerning health in general, by muscle ability and in physical efficiency as measured by the pulse-rate tests.

Poisoning the Public. By Russell C. Erb. $2.00. Dorrance and Company, Philadelphia, 1937; pp. 219.

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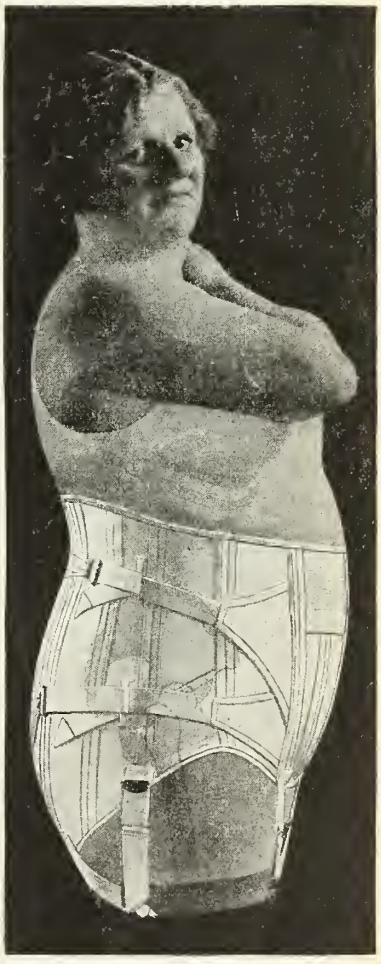
The use of incisional and umbilical hernia supports preliminary to operation is stated by a writer* in the current medical literature as follows:—"... in cases in which the hernia has protruded from the abdomen for some time, if the abdomen can be so compressed by artificial means that the hernia is replaced and the patient can readjust himself to the normal environment of the intestine in the abdomen, there is less likelihood of postoperative distension and vomiting."



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*BANCROFT, Pennsylvania Medical Journal..November 1936

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chapters are titled food poisoning, beverages, tobacco, narcotics, automobile exhaust gases, dust storms, air sanitation, poisonous plants, poisonous animals, poisonous metals, dangers in industry, questionable home remedies, household poisons, the toxicity of cosmetics, and finally autointoxication. The book is recommended for its information and as a source of material for lay talks.

Pneumonia and Serum Therapy. By Frederick T. Lord, M.D., Massachusetts General Hospital, and Roderick Heffron, M.D., field director, pneumonia study and service, Massachusetts Department of Public Health. Revised edition, $1.00. The Commonwealth Fund, New York, 1938; pp. 148.

The present edition includes additional data made available since the 1936 edition, particularly with regard to dosage, the use of rabbit antiserum, and the results of specific treatment of Types I, II, V, VII, VIII, and XIV pneumonia. This is best monograph available upon the subject. This fact, together with the modest price should result in a very large sale among Ohio physicians.

Practical Neuroanatomy. By J. H. Globus, B.S., M.D., associate professor of neuroanatomy, New York University. Wm. Wood and Company, Baltimore, Md., 1937; pp. 384.

The new edition of Neuroanatomy by Globus deserves a high rating as a valuable aid in facilitating the presentation of basic principles of the anatomy of the human nervous system. It is well written, clear and concise and the arrangement of contents lends itself admirably for reference not only to the student, but to the clinical neurologist as well who may feel the occasional need of refreshing his knowledge of the gross and microscopic structures which constitute this system.—R. C. Baker, M.D.

The Physician's Business. By George D. Wolf, M.D. $5.00. J. B. Lippincott Company, Philadelphia, 1938; pp. 384.

This is a most helpful work. It covers every business factor in practice. Interesting medical careers other than private practice, specialties, location, professional conduct, records, fees and collections, instruction to patients, furnishing and equipping an office, office personnel, technic, surgical instruments, forensic medicine, income tax, all types of insurance, current trends in medical practice—these are the major titles and most of them are handled very well indeed.

Father's Doing Nicely. By David Victor. $1.50. Bobbs-Merrill Company, Indianapolis, Indiana, 1938; pp. 170.

The author, an editor of a health magazine, sets down in most entertaining way, the things which he believes will guide the modern male through the trials of becoming a father. The whole is dedicated to Brigham Young, "who was an expectant father 57 times." While it amuses, this book also educates.

Surgical Diseases of the Mouth and Jaw. By Earl Calvin Padgett, B.S., M.D., F.A.C.S., associate professor of clinical surgery, University of Kansas School of Medicine. $10.00. W. B. Saunders Company, Philadelphia, 1938; pp. 807.

This work is intended to serve physician and dentist, medical and dental student. Certain phases of dentistry and roentgenology are well covered as well as injuries of the teeth and alveolar processes. The removal of teeth, diseases of antrum, inflammations and diseases of the neck make this the complete treatment of the subject.

The Common Neuroses. By T. A. Ross, M.D., F.R.C.P. Second Edition. $4.00. William Wood & Co., Baltimore. 1937; pp. 236.

Although acknowledging the contributions of Freud in their proper perspective, the writer of this practical little book bows to the influence of the less frequently heralded contributions of Dejerine. The book has particular value because it expounds the idea that neuroses can and should be treated by the general practitioner. The writer, however, wisely notes an exception and emphasizes that compulsion or obsessional neuroses are deep-seated psychic phenomena which offer the greatest difficulty and require the most subtle and cautious approach.

The chapters on the anxiety reaction are particularly sensible.—Louis J. Karnosh, M.D.

So You're Going to Be Married. By Bell Wiley. $1.50. J. B. Lippincott Company, Philadelphia, 1938; pp. 160.

Lot of good advice done in the modern manner on: How to get along with a husband, single or twin beds, baby or no baby, cooking, buying and saving, cleaning, budgeting, handling a maid, and canning and preserving.

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**Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245*
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154
N. Y. State Jour. Med., June 1935, Vol. 35, No. 11
Arch. Otolaryngology, Mar. 1936, Vol. 23, No. 3
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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N. Y. State Jour. Med., 1935, 35, No. 11, 590 ☐ Laryngoscope, 1937, XLVII, 58-60 ☐

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NEW FEDERAL ACT GIVES GOVERNMENT WEAPON TO STOP DECEPTIVE PRACTICES IN SALE OF DRUGS, FOODS, ETC.

THE Wheeler-Lea Bill, (Public—No. 447—75th Congress), giving the Federal Trade Commission jurisdiction over foods, drugs, devices and cosmetics, recently passed the U. S. Congress, and was approved on March 21 by the President.

A detailed explanation of the provisions of the Act and pertinent editorial comment which appeared in the April 2 issue of *The Journal of the A.M.A.*, in part follows:

"Unfair and deceptive acts and practices in the exploitation and sale of foods, drugs, diagnostic and therapeutic devices and cosmetics in interstate and foreign commerce, even though not involved in commercial competition, will shortly come under the jurisdiction of the Federal Trade Commission through the operation of the Wheeler-Lea Act, approved March 21 by the President. The act becomes effective on the expiration of 60 days immediately following the date of its approval.

FEDERAL BOARD'S POWERS

"The jurisdiction of the Federal Trade Commission over unfair and deceptive acts and practices is now limited to such as constitute or form a part of unfair methods of commercial competition. The act just approved will give the commission, too, specific jurisdiction over the advertising of foods, drugs, diagnostic and therapeutic devices and cosmetics, whenever such advertising is disseminated in interstate and foreign commerce. Advertising that is disseminated or displayed only locally will come within the jurisdiction of the commission if it is designed to promote interstate and foreign commerce in the goods advertised. Only in event of proved danger to health or deliberate fraud will the offender be liable to fine and imprisonment. Under all other conditions, he will be subject only to a money penalty, to be recovered by civil suit, and then only after he has ignored a cease and desist order issued by the commission. A cease and desist order can be issued only after notice and hearing, with the right of appeal to the courts, a process that will normally occupy not less than ninety days. Appeals to the courts may possibly delay its effectiveness over a period of years.

"After the new act becomes effective, no person, except as specifically stated, can lawfully disseminate any false advertisement of any food, drug, diagnostic or therapeutic device or cosmetic by mail. No one can disseminate such an advertisement in interstate or foreign commerce by any means to induce the purchase of the merchandise named. Neither can any one disseminate a false advertisement even locally if it is designed to induce the purchase of such merchandise in interstate or foreign commerce.

"A 'false advertisement' within the meaning of the act is any advertisement, other than labeling, that is misleading in a material respect. In determining whether an advertisement is or is not misleading, the commission must take into account not only representations made or suggested in it but also the extent to which it fails to reveal facts material in the light of such representations, or facts that are material with respect to the consequences which may result from the use of the commodity to which the advertisement relates, under the conditions prescribed in the advertisement or under such conditions as are customary or usual. In the case of a drug, however, no advertisement is to be deemed false that is disseminated only to the members of the medical profession, contains no false representation of a material fact, and includes or is accompanied in each instance by a truthful disclosure of the formula, showing quantitatively each ingredient.

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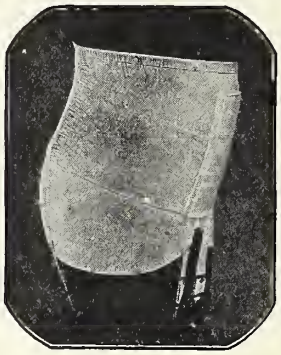
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PART OF COPELAND BILL

"The provisions of the new act that relate to advertising originated in bills designed to safeguard the public against fraud and danger to health through the distribution in interstate and foreign commerce of adulterated and misbranded foods, drugs, diagnostic and therapeutic devices and cosmetics. The advertising provisions in the present act were lifted bodily from the Copeland food and drugs act, S. 5, which has passed the Senate, and, after modification, were included in the act which has just been approved. Jurisdiction over the advertising of foods, drugs, diagnostic and therapeutic devices and cosmetics is therefore to be vested in the Federal Trade Commission, while jurisdiction over the labeling of such products will be left to the Secretary of Agriculture. There will be similar division of authority with respect to the general control of such merchandise. While the Secretary of Agriculture is still to retain specific control over adulteration and misbranding, the Federal Trade Commission can at any moment take jurisdiction on the ground that adulteration and misbranding constitute unfair or deceptive acts or practices and therefore come within its jurisdiction. Inevitably such division of authority with respect to labeling and advertising and such duplication of authority with respect to adulteration and misbranding will lead to conflicts. The enlarged jurisdiction of the Federal Trade Commission

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will necessitate an increase in personnel and laboratory resources, if effective work is to be done. The public should be aware of the situation and the medical profession must continue to investigate and to protect the public until it is satisfied that this act as administered is affording the protection that is required."

ANOTHER DRASTIC PROPOSAL

In order to further safeguard the public, Representative Clarence A. Lea, California, one of the sponsors of the legislation heretofore described, has introduced in Congress another food, drug and cosmetic bill. According to the author, the new bill extends the scope of the existing law to include cosmetics, therapeutic devices and drugs that now escape regulation. The bill provides fines ranging from $1,000 to $10,000 and imprisonment from one to three years for violations.

Principal features of the proposed legislation, which has been reported favorably by the House Interstate Commerce Committee, are:

Adulteration and misbranding of cosmetics is prohibited.

New drugs are required to be tested adequately for safety before being placed on the market.

Drugs intended for diagnosing illness or applicable to conditions of underweight, or overweight, are subject to regulation.

Foods that are dangerous because of natural poisons rather than added poisons are brought under regulation.

Definitions and standards of the identity of a product are set up.

Informative labeling of foods respecting quality and composition is required.

The bill eliminated a provision in the existing law under which proceedings could be brought against falsely labeled patent medicines only upon evidence to prove that the manufacturer knew his labels were false.

It also would require that habit-forming drugs be labeled.

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ACUTE CARDIAC EMERGENCIES

By R. C. KIRK, M.D., H. A. BAUGHN, M. D., J. J. COONS, M.D., COLUMBUS, OHIO

THE importance of cardiac disease may be best expressed by quoting the percentage of deaths due to this disease. In 1936, 31 percent of all deaths in the United States were due to heart disease, 8 per cent to cerebral hemorrhage, and 2 per cent to arteriosclerosis, making a grand total of 41 per cent of all deaths due to cardiovascular disease. (Chadwick.[1]) These diseases were in order, first, fourth, and tenth in importance in the United States as a cause of death in 1936. Cardiac disease runs progressively through a number of stages which are usually gradual, but may be greatly hastened. An acute heart failure may be induced by some aggravating cause such as infection of the respiratory tract, cough, pregnancy, obesity, marked anemia, tachycardia, disturbances of rhythm or emotion, and mental strain. Excessive exertion frequently brings about the signs of acute heart failure in persons previously free of symptoms.

PATHOLOGY

In 1842, James Hope[2] stated, "So long as the left ventricle is capable of propelling its contents, the corresponding auricle, being protected by its valve, remains secure . . . but when the distending pressure of the blood preponderates over the power of the ventricle itself, its contents, from not being duly expelled, constitute an obstacle to the transmission of the auricular blood. Hence, the auricle becomes distended and the obstruction may be propagated backward through the lungs to the right side of the heart, and there occasion the same series of phenomena." This is the theory of back-pressure failure. This idea was not seriously controverted until Sir James Mackenzie, in 1913,[3] argued that the signs of congestive heart failure are due to a diminution in the amount of blood pumped by the heart, in turn causing an inadequate blood supply to the tissues. This is the so-called forward failure theory.

There is not time or space to discuss the merits

Submitted December 10, 1937.

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of either theory except to say that the majority of cardiologists subscribe to the backward failure thesis, based as it is on a tremendous amount of clinical and laboratory evidence. For the purposes of this discussion this theory will be taken for granted, although it can hardly be denied that in many cases of aortic valve disease, hypertension and hyperthyroidism, there is forward failure, and dilitation of the left ventricle is not invariably demonstrated at autopsies in the case of patients having congestion and edema of the lungs. Similarly, Stewart[4] explains hemoptysis in mitral stenosis as due to sudden increase in the pulmonary circuit pressure with normal left ventricle action, either due to loss of the normal contractile force of the left auricle such as occurs in auricular fibrillation or an increased output from the right ventricle, which cannot pass the stenosed mitral valve and the pulmonary pressure becomes greater than the vessels can support.

The Causes of Physiologic and Structural Pathology Leading to Heart Failure: (Leech[5])

1. Contusions
2. Strain
   - Intrinsic Factors
     - Valvular disease
     - Pericardial disease
     - Disturbances of Rhythm and Mechanism
   - Extrinsic Factors
     - Hyperthyroidism
     - Emphysema
     - Sclerosis or embolus of the pulmonary vessels
     - Excessive exercise
     - Obesity
     - High altitude
     - Pregnancy
     - Myxedema
3. Diseases of the Myocardium
   - Diphtheria
   - Scarlet fever
   - Periarteritis nodosa
   - Calcification of the vessels
   - Coronary artery disease
   - Syphilis
4. Nutritional Disturbances
   - Scurvy and Beri Beri (Weiss and Wilkins)[6]
   - Severe Secondary anaemia

FAILURE OF THE LEFT VENTRICLE

Diagnosis—Signs and Symptoms. Failure of the left ventricle was first described by Hope in 1833. It may occur before failure of the right ventricle, resulting in pulmonary congestion with little or no engorgement of the peripheral veins. This is the basic factor in the production of paroxysmal dyspnea, usually nocturnal, commonly referred to as cardiac asthma. Coughing is the most important pre-disposing cause since it produces a marked increase in the respiratory rate, which accelerates the return of the venous blood to the right side of the heart which aggravates the pulmonary congestion, thus promoting the possibilities for continuation of the coughing leading to a vicious cycle, which may progress to pulmonary edema and death.[7]. The apprehension which is secondary to the coughing and the constricting tight feeling in the chest deserves particular emphasis in this syndrome of paroxysmal nocturnal dyspnea. Recently, Wood, Wolferth, and Terrell[8, 9] have advanced a new possible cause of paroxysmal dyspnea due to various unfavorable recumbent positions.

The signs and symptoms of this condition are primarily confined to the pulmonary circuit. There is an accentuation of the second pulmonic sound which is present even in hypertension. There is an elevation of the pulse often times resulting in gallop rhythm of the diastolic type, or in pulsus alternans. Both of these conditions have very serious prognoses and the younger the patient the worse the prognosis. Respirations are increased. There is very frequently Cheyne-Stokes' breathing. A grayish cyanosis is present with frequently, warm hands, indicating that the peripheral circulation is not particularly impaired. Last, and probably most important of all, is the presence of basal pulmonary rales which in the progressive forms of pulmonary edema may be heard over a period of as short a time as 15 minutes, to gradually extend up to the apices of both lungs, accompanied by pinkish, frothy sputum.

Treatment of acute left ventricular failure is as important an emergency measure to a medical man as the recognition and treatment of a perforated, hollow viscus is to a surgeon. It consists primarily of the administration of morphine in one quarter grain—.015 gm. doses which may be repeated in 15 minutes or an hour or two hours as needed. The importance of morphine in this condition is due to several effects. In the first place it eliminates anxiety and restlessness, mitigating the effect of these on the blood pressure. It depresses the respiratory center. It suppresses cough. Further measures which are often unavailable in the home, but which are usually available in the hospital are, intravenous aminophyllin (theophylline with ethylenediamine) .48 gms. in from 50 to 100 cc. of 50 per cent dextrose, given slowly intravenously. This reduces the venous pressure and increases the coronary flow.

The use of venesection of from 400 to 700 c.c. of blood is an excellent means of stopping the forward flow of blood into the already congested pulmonary circuit. The use of an oxygen tent or oxygen by nasal catheter is often times very effective. Adrenalin is not indicated in disease of the coronary arteries[10]; otherwise, it may be of considerable value in pulmonary edema. The use in the home of venostasis by the four-cuff extremity method is very valuable. It consists of

placing a rubber band or the blood pressure cuff on all four extremities high up, tightly enough to impede the venous return without cutting off the arterial flow. This may be kept on for 10 or 15 minutes trapping large amounts of blood in the extremities, and allowing the over pressed left ventricle to get a "breathing spell".

FAILURE OF THE RIGHT VENTRICLE

Failure of the right ventricle is diagnosed by a distention of the peripheral veins which is an obvious result of right ventricular failure and is always accompanied by it. There is frequently engorgement of the liver which may be pressed upon with a subsequent engorgement of the cervical veins noted following this manual pressure. Dyspnea with an efficient left ventricle is slight or absent. The oxygen lack in right ventricular failure sometimes induces a state of somnolence akin to stupor which is never present in left ventricular failure. The cyanosis varies from the cherry of early mitral stenosis to the purple of acute pulmonary embolus. Treatment of right ventricular failure consists of digitalis given by mouth or intramuscularly. There are no other drugs which are comparable in action with digitalis and its use in these two methods takes the place of the advantages which are ascribed to other things, such as strophanthus or ouabain.[5] Diuretics are rarely of service in acute heart failure, but may be used, of course, over the progressive course of the disease. Abdominal paracentesis seldom helps in the actual failure. Venesection is excellent and one of the most important things that can be done in right ventricular failure. The use of the limb bands as mentioned in the treatment of left ventricular failure is not of particular value in this type of failure.

DIFFERENTIAL DIAGNOSIS

Infrequently peripheral circulatory failure (surgical shock or syncope) is confused, but in this condition there are no dyspnea, orthopnea or venous engorgement. The cyanosis is not present. The patient is cold, pallid, and clammy. Here digitalis is definitely contra-indicated as it reduces the cardiac out-put[11] and contributes to rather than aids the cause of the original syncope.

CORONARY OCCLUSION

The signs and symptoms of coronary occlusion are too well known to be extensively reviewed. It is sufficient to add that this disease manifests itself predominantly as *substernal* pain occurring in white males after the age of 40 during the winter months.[12]* This discussion, rather, will be confined to those cases where massive cardiac infarction and consequently a grave prognosis is present. Such cases are indicated by any one or more of the following: (Herrmann)[13]

(1) Persistence of substernal pain for more than two hours.

(2) A conspicuous drop in the systolic blood pressure with extreme hydrodynamic heart failure, cardiac dilitation, shock and collapse.

(3) Considerable febrile reaction over 101° of fever persisting for more than four days.

(4) A high leukocytosis of 20,000 or more for four days or more.

(5) More than 30 per cent non-filamentous polymorphonuclear forms.**

(6) Less than 1 per cent eosinophiles.

(7) Appearance of irregularities of rhythm.

(8) The prompt development of loud murmurs or friction rubs.

(9) The occurrence of cardiac asthma, or congestive failure, or of embolism.

It might be pointed out that four, five, and six are particularly indicative of severe and usually fatal prognosis.

The chief therapeutic indication in coronary thrombosis attacks is the relief of pain as promptly and completely as possible. Morphine sulphate should be administered in ½ grain (0.030 gms.) doses at the onset, and if it causes nausea, dilaudid 1/32 grain (0.002 gms.) may be substituted. The drug which is chiefly contra-indicated in coronary occlusion is ephedrine sulphate because of its definite relationship toward the causation of paroxysmal ventricular tachycardia. If, however, the systolic blood pressure falls below 70 mm. and unconsciousness and loss of sphincter control intervene, adrenalin 0.5 cc. of 1-1000 solution every hour is the drug of choice.

Treatment of right or left ventricular failure which may occur is treated as has already been outlined. Master, Dack, and Jaffee[14] in a review of 140 cases of coronary thrombosis report cardiac insufficiency in about 66 per cent of the cases, so that the management of right and left heart failure comes to be important in this disease in the majority of instances. They, with Blumer,[15] deprecate the use of digitalis or quinidine. Blumer has pointed out that in cardiac infarction the presence of mural thrombi over the endocardial surface of the infected area occurred in about 50 per cent of the autopsied cases which justifies the attitude of these and other clinicians regarding the avoidance of medication with digitalis, unless there is some very definite indication for its use, such as auricular fibrillation or severe congestive heart failure.

DIFFERENTIAL DIAGNOSIS

Angina pectoris must be distinguished from coronary occlusion, which is sometimes a difficult distinction to make. These differences are

*Master, A. M. J.A.M.A. 109: 2157, 1937. Dec. 25, in a letter to the editor discusses 847 cases treated statistically with relation to the monthly mean temperature and concludes that no seasonal incidence can be found.

** Gorham and Thompson in the March, 1938, number of the New International Clinics conclude that a differential leucocyte count is of no prognostic significance in their series of cases.

fully discussed by Eppinger and Levine,[16] and Riesman and Harris.[17] Marvin[18] points out the extraordinary infrequency of angina pectoris in women under 40 in coronary disease. Only four cases were seen out of a total of 3,376 patients reported upon in this paper with known coronary artery disease.

Very recently, Riesman and Brown[19] have shown that the sedimentation rate is considerably accelerated; 1.0 to 2.6 mm. per minute in coronary occlusion, whereas in angina pectoris it varies from 0.73 to 1.38 mm. per minute. They have likewise shown that in 97 out of 100 patients with angina pectoris in whom attacks were brought on by having them climb a set of steps until pain ensued, the duration of the pain by stop watch was less than three minutes. If there is any doubt in the diagnosis, and if substernal pain persists more than four or five minutes after 1/200 gr. .0003 gms. (hypodermic) tablet of nitroglycerine[20] has been dissolved under the tongue, 1/3 gr. (0.020 gms.) of morphine sulphate should be given immediately and the patient considered to have coronary occlusion until subsequent events prove the true diagnosis.

White,[21] Kirk,[22] and others have pointed out the difficulties in differentiating coronary occlusion from pulmonary embolism and reference should be made to their papers on this subject. A careful history of previous trauma, surgical or otherwise, and the presence of bloody sputum, often serves to establish the diagnosis of pulmonary embolism. Papaverine hydrochloride may be effective in this condition, and a combination of atropine, ephedrine and bicarbonate of soda.[23]

CARDIAC "ARRHYTHMIAS"

Ventricular fibrillation must be considered as a cardiac emergency, not from the therapeutic standpoint but because it is an almost universal cause of death in chloroform syncope. Although chloroform as an anesthetic has practically disappeared from use in all American hospitals, its surprisingly frequent use in home obstetrical cases warrants inclusion of this subject in this discussion. The mechanism of chloroform syncope may be summarized thus:[24]

1. During the period of light anesthesia, the heart becomes hypersensitive to adrenine, and the discharge of the sympathetic nerves in the heart; 2. The presence of excitement, struggle or pain during this period reflexly liberates adrenine and produces discharge of the cardio accelerator fibers; 3. The combination of these factors produces fibrillation of the ventricles which is the direct cause of death. This occurs only during the light stages of narcosis such as occur during the induction and recovery stages. The use of adrenalin in such cases is uniformly fatal. While little can be done after fibrillation has once set in, reduction of the activity of the sympathetic nervous system by the barbiturates seems to be a rational means of prevention of syncope, or, better, do not use choloroform anesthesia.

PAROXYSMAL TACHYCARDIA

Paroxysmal tachycardia occurring in the absence of fever, exercise and intoxications, has a pulse rate of 150 to 250, and may be ventricular in origin, or may be auricular in origin. Auricular paroxysmal tachycardia is characterized by the sudden onset of a rate of 150 to 250 per minute. The beats are perfectly regular and all sound alike.[25] It is accompanied frequently by a feeling of substernal oppression and marked discomfort on the part of the patient who thinks he may be going to die. The prevention or the stopping of this type is often times extremely dramatic. Measures vary which seem effective, but holding a deep breath, vomiting, pressure on the cartoid sinus, pressure on the eyeballs, have all stopped certain attacks. In case these mechanical means fail, the subcutaneous injection of 20 mgms. of mecholyl (methyl-beta-acetyl cholin) is frequently effective. Digitalis may also be used in rather large doses.

Ventricular paroxysmal tachycardia has a sudden onset of a rate of 150 to 200 per minute; however, it is slightly irregular. There is an occasional reinforced sound heard over the precordium and the pulse in the neck is occasionally seen to bound as auricles and ventricles are opened at the same time.[26] Digitalis in this situation may cause death. Quinidine, 6 to 10 grains, (0.4 to 0.6 gms.) t. i. d. or less, is the most effective drug used.

Before closing this discussion it would seem of some interest to list the toxic effects of digitalis on the brain and certain nerve tissues.[27] This is not sufficiently appreciated, although its importance is outstanding and it has been known to cause death. Prominent among these symptoms are disturbances in vision, consisting of dimness of vision, inability to focus the eyes, difficulty in the identification of objects, the presence of scotoma and diplopia with yellow or green vision. The last are often alarming evidences of digitalis poisoning. There may be restlessness, increased nervous irritability, and periods of disorientation regarding time and place. If stupor supervenes, death usually ensues.

370 E. TOWN ST.

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Acacia Solutions

The therapeutic value of acacia solutions intravenously should not be overlooked. When the blood volume has been much lowered from any cause, acacia solution is excelled only by blood transfusion itself in restoring the blood volume. While salt solutions are valuable in these cases, the effect is transitory, since the solution diffuses through the capillary walls and is rapidly lost to the circulation. On the other hand, acacia solution remains in the blood stream for a much longer time and retains the water associated with it, resulting in sustained rise in blood pressure. The solution used is 6 per cent acacia in normal saline plain, or with glucose in amounts of 500 to 1,000 cc. Excessive amounts over 10,000 cc. should be given with caution, however, because of certain deleterious effects attributed to its long retention. The solution should have an amber color and must never be used if it is turbid or dark brown. In view of the increasing number of highway accidents associated with serious hemorrhage, all hospital emergency rooms should have acacia solution immediately available.—E. Bechtold, M.D., F.A.C.S., Belleville, Ill.; Ill. Med. Jr., Vol. 73, No. 4; April, 1938.

Cerebral Injury in the Newborn

It is fundamentally important to deal with every woman in labor as an individual case in the same considered fashion that one proceeds with any serious operation. The complacent and uncritical use of any routine analgesic medication is bound to be fraught with danger, since the drug dosages employed are often beyond the range of recognized pharmacological safety. We are convinced that this statement is substantiated by the startling lack of fundamental knowledge of the pharmacologic and experimental therapeutic action and dosage of those drugs which are so extensively employed in obstetrical work. When death of the newborn occurs, the cause is usually ascribed to asphyxia, pulmonary atelectasis and intracranial hemorrhage, although complete autopsy proof from examination of the whole body, including the brain, is often lacking. It is obvious that no cause of death is correct unless the proof is the result of a thorough investigation of the whole body of the infant, including microscopic tissue studies of the central nervous system by a competent neuropathologist.

Although the narcotic drugs employed in obstetrical practice are administered to the mother, they are capable of affecting the tissues of the child as well as those of the mother. The respiratory center is composed of highly sensitive nuclei. The effect of the narcotic drugs used is to depress the respiratory center and, if the depression reaches sufficient intensity, breathing ceases and a state of asphyxia ensues. To this state Barcroft has applied the term "Cerebral Anoxia." "Nervous tissue is more sensitive to deprivation of oxygen than is any other tissue. Anoxemia of mild degree impairs its coordination. Even a short duration of asphyxia abolishes its functional activity. Complete anoxemia maintained even for ten minutes, or less acute for a longer time, may lead to irreparable damage to the nervous system."

It is quite the habit in obstetrical practice to conduct a woman through labor without pain or memory of the event. Subject to reasonable restrictions this is a commendable and scientific practice.—Frederic Schreiber, M.D., and Nathaniel Gates, M.D., Detroit, Mich.; Jr. of the Mich. State Med. Soc., Vol. 37, No. 2, February, 1938.

Surgery vs. Irradiation

I believe that poorly administered irradiation is a worse procedure than inexperienced surgery, for the latter has a chance for a cure, while the former gives no more than a false impression of improvement. Of course the ideal lies in either close cooperation between experienced representatives of the surgical and radiological departments or the combination of these qualities in one individual.—D. J. Roberts, M.D., Hartford, Conn.; Jr. of The Conn. State Med. Soc., Vol. 2, No. 4, April, 1938.

HYPNOSIS

By MEYER A. ZELIGS, M.D., Cincinnati, Ohio

WHEN the word hypnosis is mentioned most people think of some Svengali-like person flashing dazzling, sinister eyes at some poor helpless victim whose will power crumbles under the onslaught. Hypnosis is nothing quite so strange and mysterious as these people imagine. Few topics are more fascinating and few so little understood. My purpose in this paper is to rob hypnosis of some of its mystery and to exhibit it in its true light as a useful scientific tool. In order to give you a better understanding of the problem, I shall present first a brief historical sketch, tracing primarily the important concepts of hypnosis and showing how our present ideas finally emerged.

ITS HISTORY

The modern history of hypnosis begins with the work of Franz Anton Mesmer, a Viennese physician, about 1775. He began to study what he considered to be the curative powers of the magnet. He found that certain patients when touched by a magnet were cured of certain diseases. He learned, after, that patients could receive the same benefits by a touch from him or from any object which he held. He thus developed and put forward to the scientific world the theory and practice of what he called animal magnetism; the theory that persons have radiating from them a magnetic force which will influence others who come under the range of this power. No doubt the spirit of the times tinged his practice with something of the mystical. Having failed of success in Germany, he went in 1778 to Paris where he soon had a tremendous vogue. There he opened a remarkable clinic in which he treated all kinds of diseases.

In 1784, one of Mesmer's followers found that patients could be made to enter into a state which was named artificial somnambulism. The chief characteristic of this state of sleep was that the ideas and actions of the so-called "magnetized" person could be directed by the magnetizer. With this new discovery, the basic test of animal magnetism became the power to place a subject into an artificial sleep rather than the healing of any particular disease. Mesmerism became known as the process whereby one individual by means of animal magnetism could cause another to enter an artificial somnambulism.

After a series of disputes with learned Parisian societies, a commission to investigate Mesmer's work was appointed by the throne. Their verdict resulted in the destruction of his pretensions. The Royal Society of Medicine at about the same time made the following report:

"From a curative point of view animal magnetism is nothing but the act of making sensitive people fall into unconsciousness. From a curative point of view animal magnetism is useless and dangerous."

This marked the end of Mesmer's popular favor in Paris and he returned to Germany.

AS ANESTHETIC

In 1837, however, another of Mesmer's pupils, Dr. Oudet, a member of the Academy of Medicine, performed the painless extraction of a tooth, by putting the patient in a hypnotic condition. This operation attracted the attention of James Braid, a young English surgeon who became interested in hypnosis. After several years of study, Braid showed clearly that hypnotic effects were to be explained psychologically rather than by postulating any mysterious or magnetic force. He proved that what happened to the subject during mesmerism was purely a subjective phenomenon, depending upon the changes induced in the subject's mental state. His explanation was that hypnosis was the result either of fatigue or of a particular type of fixation of the attention. In accordance with this thought, he developed a special technique for inducing the trance, a method still extensively used. Originally he caused his patients to look at a glass stopper bound to his forehead. His later procedure was to have the subject look fixedly at some bright object, such as his lancet case, which was held near the eyes in such a way that the eye muscles were under a certain amount of strain. This technique was usually combined with verbal suggestions, though he did not appreciate the great importance of the role played by suggestion in the process. Braid coined the word "hypnotism" from the Greek "hypnos" meaning "sleep", and utilized the trance mainly

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for painless surgical operations, which he performed in large numbers.

Later, about 1865, Liebault and Bernheim, at Nancy, developed Braid's idea more extensively, and declared that hypnotism was the use of suggestion, nothing more. The Salpetriere School in Paris, on the other hand, led by Charcot, declared that hypnosis was a peculiar disease, or rather a symptom of a disease, that could be induced in neurotic patients. That, in fact, susceptibility to hypnosis was a symptom of hysteria. Professor Janet still maintains this view, despite the fact that many experienced physicians have opposed it and have reported that they find it possible to hypnotize a very large proportion of normal, healthy persons. I am inclined to accept the latter view, for I have found that, in many cases, well-balanced healthy men and women make easy subjects, provided they are perfectly willing to be hypnotized.

It was about 1880 that Sigmund Freud read about Professor Charcot of Paris, who was experimenting with hypnotism. Charcot found that he could hypnotize an hysterical person and suggest to him the symptoms of another person and the patient would then have this symptom. In other words, he maintained that hysterical symptoms can be suggested through hypnosis, and if they can be suggested, they can be removed by hypnosis. This work attracted Freud, and he left his practice in Vienna to become one of Charcot's pupils.

When Freud returned to Vienna, he utilized his recently acquired knowledge in the treatment of cases of neurasthenia. With this valuable tool, toether with the aid of Breuer, was developed the so-called "cathartic method" of treatment. He took cases that had been resisting treatment for years and cured them by means of mental catharsis under hypnosis. From this work as a starting point, Freud later formulated his theory of the conscious and the unconscious and developed subsequently his views on psychoanalysis and free association.

Such, in brief, is the history of hypnotism. Many sciences have descended from magic and superstition, but none have been so slow as hypnosis in shaking off the evil associations of their origin. None have been so slow in taking on a truly experimental and genuinely scientific character. Practically all of the actual phenomena were discovered and described during the first 50 years from 1775 to 1825. But the century since 1825 has shown a remarkable sterility. Almost nothing of significance has been accomplished during this period except the very gradual correction of errors which originally resulted from bad experimental procedures.

DIFFERENTIATION

I should like, now, to differentiate hypnosis from the ordinary forms of waking suggestion. By suggestion, we mean the ready acceptance, without proof, of propositions which may have no logical basis. It is the exact opposite of negativism. Hetero-suggestion, as the word implies, is the tendency to accept a proposition made by others; auto-suggestion, the propensity to influence oneself. Let it be clear from the start that suggestion is certainly nothing abnormal or exceptional, nothing which leads us away from our ordinary life. We all know, for example, that there are certain teachers whose authority gives to their every word such an impressiveness and dignity that every opposing thought disappears. Of course, the readiness to accept suggestions varies with different individuals. Furthermore, it should be understood that a suggestion is simply an idea, no different from any other ideas, except in the way in which it takes possession of the mind and reduces the chances of formation of any opposing ideas.

When an individual is receiving suggestion, the conflicting tendencies, which in other situations would inhibit his actions, now become dissociated or thrown out of connection. He is, so far as his suggested behaviour is concerned, quite analagous to a child whose sum of experiences is still too small to check the veracity of ideas which are presented and to reject what is untenable. In normal waking life, suggestion thus operates to reduce restraint; in other words, to produce a state of mental dissociation in which one part may express itself, with relative freedom.

The following rather humorous illustration indicating how suggestion works on the average mind is given by John Morgan in his book on the "Psychology of Abnormal People." He quotes this from a display placed in the window of a well known New York bank:

"Glorious opportunity to get rich quick! Invest in the California Ranching Company now being organized to start a cat ranch in California. We are starting a cat ranch in California with 100,000 cats. Each cat will average 12 kittens a year. The cat skins will sell for 30 cents each. One hundred men can skin 5,000 cats a day. We figure a daily net profit of over $10,000.

"Now what shall we feed the cats? We shall start a rat ranch next door with 1,000,000 rats. The rats will breed twelve times faster than the cats. So we shall have rats to feed the cats.

"Now what shall we feed the rats? We shall feed the rats the carcasses of the cats after they have been skinned.

"Now get this. We feed the rats to the cats, and the cats to the rats, and get the cat skins for nothing. Shares are selling for 50 cents each, but the price will go up soon. Invest while opportunity knocks!"

A number of persons came into the bank to buy this stock. This reveals that in these people a mental dissociation occurred—the one part

being more in harmony with the suggestion to "get rich quick" than the other which warned them to avoid foolish fakes.

Suggestibility may be increased by emotional disturbances, fatigue, drugs, or alcohol. Now, hypnotism embodies all the principles of suggestion, except that it involves a much deeper state of dissociation and represents the extreme attitude of suggestibility of the subject. It must be remembered that this attitude of the hypnotized person is one which is entirely subjective in its nature and not the result of any unusual power possessed by the hypnotist. The potency of hypnotic suggestion lies, not in the individual who gives the suggestion, but in the conditioned personality of the individual who receives it.

Hypnosis has been defined by McDougall as an artificial state of sleep. Some authors refuse to regard hypnosis as allied to sleep, on the ground that subjects in hypnosis are lively, walk and talk, and observe the world about them with all their senses. And yet, the similarity between sleep and hypnosis is very close, for in this connection we must remember that in sleep complete quiescence is not always the rule; most of us dream and some of us occasionally walk and talk in our sleep. Now, if one simply induces deep hypnosis and leaves the patient alone, the resemblance of hypnosis to normal sleep is very close. The subject lies inert, in a condition distinguishable from sleep in only one way, namely, in that he continues to be responsive to the operator in a characteristic manner described by the word "rapport." While this rapport continues, the patient, though extremely responsive to every word from the operator, remains nonreceptive of other sense impressions to which the normal sleeper would respond. We may say, then, that a typical deep hypnosis is a form of sleep modified by the rapport between patient and operator. The theoretical nature of this rapport is one of extreme interest and its explanation constitutes an important problem in hypnosis.

TECHNIQUE

I shall now pass on to the technique of induction of hypnosis. There is no one method or rule of procedure for the induction of hypnosis. The various methods fall, however, under two general heads; the so-called method of domination and the method of cooperation. The former consists essentially in adopting a rather domineering, commanding tone, and in assuming the possession of a mysterious and tremendous power which one is about to exercise on the patient; in short, the essence of this method is to throw the patient into an attitude of submissive awe towards the operator. The other method consists in explaining as clearly as possible to the patient the nature of the operation, and of the results to be expected, taking him into one's confidence and eliciting his voluntary cooperation. Both methods have their proper occasions. For the purposes of the showman, and for dealing with patients of certain types, the domineering method is, no doubt, the more effective. It is possible that with the majority of patients it may be more effective in producing immediate results; but it has its drawbacks. By the use of it, we run a risk of undermining the patient's morale and of creating in him an enduring attitude of dependence. Whereas, if we use the method of cooperation, making him feel that he must take an intelligent and voluntary part in the process rather than merely resign himself into our hands like a mass of soft clay, we avoid that risk.

The usual procedure, which varies extensively in detail, is to ask the patient to recline in an armchair or couch, to make himself as comfortable as possible, and to relax all his muscles. He is told that he will feel restful and sleepy and will soon pass into sleep. For a short time, he is asked to gaze steadily at some small object held about a foot from his forehead and a little above the line of vision. This fixation serves to induce fatigue in the ocular muscles. The patient is told that his muscles are relaxing more completely, that his limbs feel heavy, that his eyes are growing tired. Presently he is told that his eyes are closing and, since by this time he is glad to be relieved of the somewhat fatiguing strain, his eyes usually close. The operator continues to talk to him, gently but firmly suggesting complete rest and relaxation, and whatever of the usual experiences that attend the process of falling asleep he may like to mention.

THE HYPNOTIC STATE

The first definite sign of hypnosis is a disinclination to move. This quickly passes into an incapacity to move any part of the body which the operator suggests is now too heavy or too sleepy to be moved. In this early stage, many patients feel that they could move the part if they really wished to, that is to say, if they had a sufficiently strong motive for so doing; but they do not wish to move—to do so would require an effort which they are not disposed to make. This is the critical point of the procedure. If the operator now challenges the patient to make a certain movement, insinuating or even boldly asserting that the movement is impossible, and if then the patient tries and fails to achieve the movement, the success of this suggestion strongly disposes the patient to the acceptance of further and more difficult suggestions. Most of the subjects with whom these first suggestions succeed will soon pass, either spontaneously or with the aid of further suggestions, into a more marked state of hypnosis. In this stage, contracture of muscles may be induced; for ex-

ample, the extended arm may be rendered rigid by verbal suggestion. And now the patient will fail to achieve a forbidden movement, not merely because he cannot or will not make the necessary effort; but because when he tries to make the movements and succeeds in innervating the proper muscles, the antagonistic muscles come into play and prevent the movement. At this stage, then, there is manifested a certain dissociation; or splitting of the personality, a conflict of one part against another, the muscles of one set obey the one part—the conscious willing subject; the antagonistic muscles obey some other part of the personality which understands and is controlled by the commands and suggestions of the operator.

This represents the simplest evidence of mental dissociation—and is similar in essence to that which occurs in many of the functional disorders. The subject may continue to be aware of his surroundings and to be able to give post-hypnotically a fairly complete account of his experience at this time. The deeper stages, however, are followed by post-hypnotic amnesia. These stages are revealed also by a more complete subjection to the operator's suggestions than is obtained in the lighter stages. In the deeper stages the motor and sensory functions are completely controlled by the word of the operator. He can at once induce or remove any form of paralysis or contracture or create complete anesthesia of any part. These motor and sensory phenomena imply clearly some functional dissociation in the nervous system. For example, when the left arm is completely anesthetic and completely beyond the voluntary control of the patient, whether in a flaccid paralysis or in a state of contracture, we are justified in inferring that the neurones connecting the limbs with the brain are somehow shut off or isolated; that their functional continuity with other neurone systems is interrupted. Now where, at what level their rupture of continuity occurs, is a difficult question. Possibly it happens at synaptic junctions, but whether at those of the subcortical, or cortical level—it is difficult to say.

But there are facts indicating that in some cases, this dissociation occurs in the higher cerebral centers and involves a considerable portion of the cortex. At least this is the explanation given by psychologists in the occurrence of so-called "negative hallucinations," an example of which may be illustrated thus:

The hypnotized subject is told that one of the persons present, is no longer present. He then behaves as though this person were imperceptible to him. If told to go over and sit in the chair occupied by this person, he will go and sit on his lap, and then perhaps appear puzzled by the strangeness of the chair. The subject can also be made to believe all sorts of absurdities. For instance, if told that he is Napoleon, he will play the part, and in general will play it far better than he would or could in the waking state.

These phenomena have been made the center of a prolonged controversy as to the degree to which hypnotic influences can be used to induce improper or even criminal acts. Since it was possible to put a paper dagger in the hand of a hypnotic subject and induce him to strike it vigorously against the bosom of a bystander, it was natural that the question should arise—can a man be induced by hypnotic suggestion to commit a crime? Some distinguished authors, notably Delboeuf, were inclined to believe that this was entirely possible. But it has been made clear that, though it is possible to assert that hypnotism may be used to bring a criminally disposed person to the point of action, it is not possible to induce criminal actions by a normal person by simple direct suggestions. Professor Janet illustrates the point with a very amusing story.

Some authority had demonstrated to a group of students how easily he could induce his patient, a respectable young woman, to commit, under hypnosis, supposed crimes with paper daggers and harmless poisons. Then he left the patient to the tender mercies of the students, who suggested to her that she strip off all her clothes. At once the young woman came out of her hypnosis and went home in a state of moral indignation. (This was in 1890!) The story, however, is instructive in showing that the patient cannot be easily induced to perform any action to which his moral character is decidedly opposed.

We thus have further evidence in these phenomena of a temporary splitting of the personality. While one part accepts absurd suggestions and acts them out in a systematic fashion, another part silently watches, aware that the whole thing is, as it were, a game; but if the game threatens to go too far, or to overstep the limits prescribed by the moral nature of the subject, this part becomes active, steps in, and puts an end to the game by terminating the hypnosis and effecting the reintegration of the personality. That is to say, a sufficiently strong motive may destroy the artificially produced state of dissociation and succeed in effecting reintegration.

HYPERMNESIA

The effect of hypnosis on the memory is interesting and has been studied by many investigators. I refer to the capacity of subjects in the hypnotic trance to recall events which are completely lost to the ordinary waking memory. This special facility of recall is termed "hypermnesia." Hypnosis has been used to bring about recall in hysterical amnesia; many cases of which have been studied and reported in voluminous detail. Also incidents of very early childhood which have been completely forgotten may be recalled

under hypnosis. Bramwell has demonstrated this peculiar feature of the hypnotic state in the following manner:

Certain subjects were first questioned in the normal state as to the earliest events they could remember, when it was generally found they could recall nothing which had happened before the age of five or six. They were then hypnotized and starting from the first event in their lives they could recall, it was suggested they should revive the memory of earlier and earlier incidents. Some of the subjects were able to relate what they stated had happened at the age of two, and one described a children's party given on the anniversary of her first birthday! Reports of such remarkable power of recall as the two just cited naturally arouse a considerable degree of skepticism as to the genuineness of the memory. There is always the possibility that the subject under the influence of suggestion has fabricated the report. As a rule, however, wirters who report such results are more or less aware of their difficulty and usually seek by means of the testimony of relatives to substantiate the accuracy of the supposed memory as to fact.

This unusual capacity for recall is illustrated also in the hysterical amnesias. I, myself, have had occasion to induce hypnosis in eight cases of hysterical amnesia resulting from some severe emotional disturbance. Five of these patients could recall nothing of what took place during a period ranging from several hours to several weeks. They could recall neither their names nor anything of their former lives. Under hypnosis, the cause which provoked this condition was exposed in a rather precise manner, following which there was dramatic disappearance of the amnesic symptoms when the patient was awakened. The explanation of these results is really not one of greater facility of recall, but rather that hypnosis removed the inhibition or mental block produced by the emotional complex.

Finally, I should like to consider some post-hypnotic phenomena. I shall begin with post-hypnotic amnesia since it is in direct contrast and really the reverse process of what occurs in hypnotic hypermnesia. Post-hypnotic amnesia is the remarkable inability shown by many subjects to recall in the normal state events which took place during hypnosis. Since the publication of Liebault's book on hypnotism in 1866, post-hypnotic amnesia has been recognized as a characteristic sequel of deep hypnosis. In fact, most writers since Liebault have considered post-hypnotic amnesia as the most significant single symptom of hypnosis and as marking the most profound degree of hypnosis which it is possible to attain. These subjects or somnambules as they are called, have the capacity while in the trance to recall events of previous trances, even though the latter events cannot be recalled while in the normal state. Thus Moll remarks:

"In some cases, chiefly in the deepest hypnosis, memory of the hypnotic proceedings cannot be recalled on awakening—on the other hand, the subject remembers in hypnosis all that has happened in previous hypnoses."

He relates the case of a woman who remembered in a hypnotic state all that had taken place under the hypnosis 13 years before, although in the meantime she had never recollected it.

The second major post-hypnotic phenomenon is post-hypnotic suggestion. This also appears to have been discovered very early in the history of hypnosis along with post-hypnotic amnesia and the other major hypnotic phenomena.

If, during deep hypnosis, the subject is told that at a given signal after wakening he will perform some simple action, this act is usually done in a natural manner. For example, I tell the subject during hypnosis, that when I put my hand in my pocket he will open the window. After he has been wakened and has opened the window, I ask him why he did so. If he is not amnesic for the hypnotic period, he will probably say—"because you told me to do so." But if he is amnesic he will give some plausible reason, e.g., although the air may be cool and fresh he may say that the room seemed stuffy and hot to him. In other words, he rationalizes because he does not know the underlying nature of his action. This reveals almost unmistakably the fact that dissociation with splitting of the consciousness had occurred.

How long post-hypnotic suggestions might continue to work effectively is difficult to say.

Clark Hull, professor of Psychiatry at Yale, has recently devised an experimental technique by which it is possible to measure the strength of a post-hypnotic suggestion and to trace its course as it declines with the lapse of time.

By the use of memory tests in normal subjects used as controls compared with post-hypnotics, he has found that the curve or diminution in the strength of post-hypnotic suggestion is most rapid at first and becomes progressively slower as time goes on. In this respect it resembles the curve of ordinary forgetting. He shows, however, that daily repetition of the same post-hypnotic suggestion strengthens its durability for many weeks. One can thus see that the therapeutic efficiency of post-hypnotic suggestion depends partly upon its repetition.

CONCLUSION

In conclusion, I should like to say a word about the general attitude towards hypnosis today and explain how this feeling came about. At the time of Braid's publication of hypnosis as a subjective mental process, the physiological and anatomical approach in the study of medicine was at its height and anything not physiological was discarded as belonging to metaphysics and not to medicine. Moreover, the discovery in 1846

of ether and chloroform superseded hypnosis as an anesthetic, and physicians discarded it for this use. It soon became the stamping ground for charlatans, who hoped to make some monetary profit from it. These fakirs, with performances that were mostly frauds, went from town to town and demonstrated to gaping audiences how they could put people to sleep and make them do many queer things. To confess that one had any faith in these performances was equivalent to admitting one was a dupe. No one in the scientific world dared to dabble in a thing of such ill-repute. Nevertheless, with its spectacular elements gone, hypnosis has accomplished for us a valuable service. It has shown us how a personality may be disintegrated; and how a person may act from impulse without any knowledge of why he acted. It has shed a flood of light on the problems of memory. It has supplied us with an adequate explanation of the psychological mechanism of hysteria and functional dissociation and has been of real clinical value to us in the handling of these cases.

638 DOCTOR'S BUILDING.

Difficulties Encountered in Dealing With the Tuberculosis Problem

To persuade people, especially young people, to submit to observation and treatment during what might be called the "antenatal" stage of the disease in which no certain diagnosis can be made in the face of the doctor's suspicion, is a problem of the general practitioner. The chief reason for the reluctance of patients to seek medical aid include:

1. The temporary improvement in their general health following treatment which lulls both the patient and the doctor into a false sense of security.
2. Prejudice against being regarded as a subject for notification. Patients fear the social stigma, segregation and threatened invasion of their homes by the authorities.
3. Alarm caused by the prospect of losing income. This is probably the greatest obstacle to continued observation. The vast majority of working class people simply cannot afford to be ill and hesitate to seek an opinion which will run counter to their own inclinations.

Other difficulties include the isolation of the patient at home, the supervision of contacts, and the question of fitness for work. The doctor's greatest difficulty is the social environment and low standards of living of his patients.—My Chief Difficulties in Dealing with the Tuberculosis Problem, W. F. Jackson, M.B., Ch.B., J.P., Tubercle, Vol. XIX No. 3, December 1937.

Convalescent Serum

The results of different investigators who have used convalescent serum are remarkably uniform. From a total of 2,334 susceptible home contacts, which we gleaned from various reports in the American and English journals who received convalescent serum or corresponding doses of convalescent whole blood 1,582, or 67.7 per cent, were protected; 666, or 28.5 per cent, developed modified measles; and only 86, or 3.6 per cent, contracted typical measles. There were no complications reported in this large group. Of 193 control contacts observed in the same homes, 155, or 80.3 per cent, developed measles. Among this relatively small group there were recorded four cases of complicating bronchopneumonia with two deaths.

In our own study of 423 home contacts none of whom gave a history of measles and all of whom were subject to direct exposure to the disease, a total of 413, or 97.7 per cent, were benefited by the prophylactic injection of convalescent serum. Illness was prevented in 72.5 per cent, and modified in 25.2 per cent, of the contacts. Thus less than 3 per cent failed to give evidence of benefit from the use of serum. Any method offering such favorable results deserves very serious consideration.

Although there is no question concerning the prophylactic value of measles convalescent serum, many authors have stated that it lacks therapeutic effect when administered after the onset of symptoms. Apparently for this reason the therapeutic use of serum has not been tried on a very large scale. We have been able to find in the literature a total of thirty-eight cases of measles, plus seven of our own, in whom treatment with convalescent serum was carried out. The course of the disease was thought to have been definitely modified in thirty-eight, or 84 per cent, of the forty-five cases. Subsidence of symptoms followed within twenty-four to forty-eight hours of the injections. Among our small group of seven cases, four had a modified attack of measles and three showed no improvement. In these three cases convalescent serum obviously did not have a fair therapeutic trial; one child was moribund when the serum was given as a last resort; the second child who was twelve years of age received too small a dose of serum, even less than the usual prophylactic dose according to age.—Clarence M. Hyland, M.D., Los Angeles; Rocky Mountain Med. Jr., Vol. 35, No. 2; February, 1938.

For thousands of years medicine has united the aims and aspirations of the best and noblest of mankind. To depreciate its treasures, is to discount all human endeavor and achievement as naught.—Karl Marx.

CHRONIC PELVIC INFLAMMATORY DISEASE: REVIEW OF 121 CASES

By LEO R. MARKEY, M.D., Cleveland, Ohio

THE Elliott Treatment has been accepted as a method of utilizing heat therapy for inflammatory conditions of the female pelvis. Pelvic inflammation is defined as inflammation in the pelvis outside of the uterus. The causes for such inflammation are many. Seventy-five per cent may be attributed to gonorrhea; 10 to 15 per cent from post-abortal or postpartum infections; while the remainder may be due to tuberculosis (most commonly of the Fallopian tubes), instrumentation, operation, intercourse, abscess of the appendix, sigmoid diverticulitis, and ulcerative colitis[1]. The streptococcus and bacillus coli are the most common organisms of this latter group. The pelvic peritoneum in the female is only too often reached by invading organisms because the anatomy in the female constitutes a direct passage from the outside through the vagina, cervix, uterus and tubes.

Heat has been advocated for many years in the treatment of infections, especially those due to the gonococcus organism. It has been shown by Boak, Carpenter and Warren[2] that most strains of gonococci are destroyed by temperatures of 105.8 degrees Fahrenheit, for a period from 7 to 28 hours. This has been used practically in the hypertherm cabinet where treatments are given six times for six hours a treatment. Heat accomplishes many purposes. Besides the destruction of bacteria, it stimulates both blood and lymph flow to the area, it is soothing, relieves pain, and stimulates leucocytosis.

The Elliott bag and vaginal diathermy has replaced the cabinet form of heat, since it has reduced the length of each individual treatment and is less exacting of the patient. It furnishes a means of introducing and maintaining dry heat in the vaginal cavity at definite temperatures and pressures. It also distributes this heat directly and evenly to the entire pelvic cavity and adjacent structures.

In evaluating the treatment of 121 consecutive cases in the out-patient department of Mount Sinai Hospital, Cleveland, Ohio, it should be kept in mind that the success of any method depends on two factors—first, the proper indication; and the second, the correct technique. When there is a poor result or no result, one is prone to blame the method, whereas the cause of the poor result is improper indication and faulty diagnosis.

The technique used at Mount Sinai Hospital follows that described and used at the Mayo Clinic. Before the purchase of the Elliott apparatus, the application of the Elliott principle in the out-patient department was by use of a balloon attachment to the hydrotherapy control table, with temperature and pressure control. It was soon found that this was not entirely satisfactory, because there was a heat loss in the plumbing line to the patient and the flow was affected when the laundry needed hot water. In the latter case the drain on the hot water system was tremendous so that if the temperature of the water when treatment was first started was 115 degrees F., five or ten minutes later it might be 90 degrees F. or lower; and when the laundry stopped using hot water, the temperature would shoot up to perhaps 145 degrees within a very short time.

All this has been eliminated with the purchase in February, 1937, of the Elliott treatment regulator. The technique used is as follows: The bladder and rectum must be empty. The sterile Elliott bag, empty of water, folded on itself and well lubricated, is introduced into the vagina under sterile precautions. The tube leading to the bag is wrapped with several layers of moist gauze to protect the introitus and vagina. During the treatment it is kept moist with occasional drops of water by means of an eye dropper. The bag is distended with water at about 110-115 degrees F, under pressure of two to two and a half pounds and gradually the temperature is brought to 118 degrees F. for one-half hour. The treatments following, are given every other day for one hour, and the temperature is increased at successive treatments so that a temperature of 125-127 degrees F. is reached. At no time should the patient be uncomfortable, and from time to time during a treatment, she is asked as to her comfort and if she complains of too much heat, adjustments are made. A small pillow is placed under her knees, and the tube carried over this so that the tube enters the vagina from an upward direction. Patients are allowed to rest for one hour following each treatment.

The proper indication as well as the correct

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technique for the use of the Elliott treatment is essential. This treatment is contraindicated in cases of tuberculosis, malignancy or bleeding. Of 121 cases studied, there were 28 cases or 23 per cent where no indications were present. These were ovarian cysts, retroversion, pelvic adhesions, fibromyoma, constipation, peritonitis due to ulcerative colitis and tubo-ovarian masses. In this is also included 12 cases that started but did not finish their treatment or were lost track of. There were 90 cases of chronic pelvic inflammatory disease treated. Seventeen cases or 14½ per cent showed no improvement clinically after a course of treatment. Five of these cases later came to surgery. Seventy-three cases or 60 per cent showed definite improvement and amelioration of symptoms. One of these patients later became pregnant. Six of these patients had previous gynecological surgery with recurrence of symptoms. Five of these patients had relapses, the causes which were unknown and they later were operated upon.

Hospital and City	No. of Cases	Improved	Unimproved
Mt. Sinai Cleveland, Ohio	90	73 81%	17 19%
Mayo Clinic Rochester, Minn.	125	96 77%	29 23%
Bellevue New York, N. Y.	56	43 76%	13 24%

There were three cases of subacute pelvic inflammatory disease who were treated in the hospital. One of these patients developed a severe reaction with pain, elevation of temperature and pulse, after the initial treatment so that further treatments were discontinued. Conservative treatment was instituted with relief of symptoms. In the other two cases, there was a slight reaction to the first Elliott treatment but successive treatments for five days showed slight clinical improvement. Surgery later in both cases showed tubo-ovarian pathology.

There were two burn cases. One was a small blister on the labia which was noted immediately after treatment. This gave no discomfort and disappeared in a few days. In the second case, the patient was receiving her fourth treatment. Her third treatment had been given two days previously at a temperature of 127 degrees F. This fourth treatment was given at a temperature of 126 degrees F. She was asked several times during the treatment regarding her comfort and made no complaints. That evening she had a chill followed by an elevation of temperature. Her physician was called who found a burn both of the cervix and left vaginal vault. Recovery was uneventful.

Burns of the vagina and cervix are due to either incomplete distension of the bag and vagina, or to negligence of the operator. If burns occur, it is best not to stop treatment but to reduce the temperature at subsequent treatments and keep full distension. The slough will be replaced with new mucosa.

SUMMARY

1. The Elliott treatment furnishes a means of introducing and maintaining in the vagina, uterus, rectum, bladder and pelvic peritoneal cavity constant dry heat at any desired temperature and pressure, distributing its hyperemic effects directly and evenly.

2. There is, as a result of this local heat, an increased leucocytosis with a subsidence of congestion and inflammation, an absorption of exudate, destruction of bacteria and increased secretion of the cervical and vaginal glands which wash away the infectious organisms.

3. Complications from burns are very infrequent under proper technique. They heal quickly and treatments should not be discontinued on account of them.

4. In the out-patient department of Mount Sinai Hospital of Cleveland, Ohio, 121 cases of chronic inflammatory disease received the Elliott treatment. Twenty-eight cases or 23 per cent were patients wherein Elliott treatments either were not indicated or were lost track of. Seventeen cases or 14½ per cent received little or no benefit. Seventy-three cases or 60 per cent were definitely improved. One case later became pregnant. Three cases or 2½ per cent in the subacute stage received treatment in the hospital with slight improvement in two cases.

CONCLUSIONS

1. The Elliott treatment will clinically cure a high percentage of chronic pelvic inflammatory disease regardless of etiology.

2. The technique of administering Elliott therapy is not difficult but calls for trained personnel.

3. Surgery when necessary for chronic pelvic inflammatory disease is made easier as a result of previous Elliott treatments.

4. The proper indication and correct technique are essential for good results.

5. Patients are ambulatory.

903 REPUBLIC BUILDING.

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MEDICAL TREATMENT OF CHRONIC CHOLECYSTITIS

By OSCAR BERGHAUSEN, B.A., M.D., CINCINNATI, OHIO

IT is becoming more apparent that chronic cholecystitis is a frequent complication, that it exists to a varying degree in many individuals past the age of 40, that its etiology is linked with organic and functional disturbances in neighboring organs, that its management should be more medical than surgical in its early stages. We all agree that a dyspeptic individual with recurrent attacks of epigastric pain radiating to the back, associated with nausea and vomiting and especially jaundice, should be treated surgically. Experience has shown that the greater the preoperative findings, the more satisfactory are the postoperative results. The noncalculous gallbladder with or without cholecystographic findings, is less amenable to surgical intervention than the calculous gallbladder, and frequently requires more intensive postoperative medication. As physicians it is most important for us to pay attention to the differential diagnosis of cholecystic disease from functional and organic diseases of the neighboring organs.

When the patient presents himself complaining of epigastric distress, dyspeptic symptoms, occasional colicky attacks associated with vomiting and headache, he frequently is subjected to cholecystographic examination. When the test is positive for the presence of gallstones surgical measures are suggested. When no outline of the gallbladder is demonstrable in the cholecystogram the patient is told that the findings are suggestive of cholecystic disease. In many instances it would be wiser to repeat the test in order to correct technical errors. Again it would be wiser to have the patient submit to a series of duodeno-hepatic lavages in order to treat cholecystatony or cholangeitis which might be amenable to repeated lavage and a high fat diet.

In the examination of the bile particular attention should be directed to the color sequence in the various specimens of bile as it comes from the duodenal tube. The lack of the proper color sequence especially if shown in repeated drainages, indicates the presence of a pathologic condition, a poorly functioning gallbladder due to chronic changes in the wall, cholecystatony, a block in the cystic duct, cholangeitis, or compression on the ducts from without. The presence of bile stained biliary epithelium, cholesterin crystals, calcium bilirubinates, clumps of pus cells and bacteria, further suggest the presence of cholecystic disease. It is true that in many cases of chronic colitis and constipation cholesterin crystals and bilirubinates may be found, indicating the presence of at least a temporary functional derangement of the biliary tract.

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In the writer's experience 62 of 66 patients presenting symptoms of cholecystic disease showed some abnormality in the bile as obtained by transduodenal lavage, a percentage of 94, as compared with 17 of 26 patients in whom a positive cholecystogram was obtained, a percentage of 65. Again in 23 patients in whom an examination of the bile and the cholecystogram was made, 19 of the patients showed evidence of abnormality in the bile, and 13 in the cholecystogram. In a recent article Doran, Forster and Spier[1] report an analysis of 60 operative cases in whom combined examinations were made, finding cholecystography superior to biliary drainage as a diagnostic measure since 93 per cent showed positive cholecystograms and 83.6 per cent showed positive evidence of pathologic disturbance in the examinations of the bile, in the presence of cholelithiasis. Actual calculi were demonstrated by biliary drainage in 43.7 per cent, by cholecystograms in 30 per cent of cases. By combining the two they found actual pathology indicated in 95.9 per cent of cases, concluding that non-surgical drainage is a useful procedure, comparing favorably with cholecystography and that the finding of crystals is indicative of pathology in the biliary tract.

In deciding what therapy should be introduced in the presence of positive evidence of cholecystic disease, many factors should be taken into consideration, the etiologic, the structural lesions, altered physiologic functions, the limitations of therapy and the contraindications of operative measures. It would be helpful to adopt a classification as follows:

A. Etiologic Diagnosis: age, sex, habits, antecedent infections, disease in neighboring organs, malignancy.

B. Physiologic Diagnosis: extent of impairment in the various biliary functions.

C. Functional Capacity: extent of impairment of the ordinary physical activities of the patient.

In common with others the writer has found that cholecystic disease is more common in women, 57.4 per cent of 108 patients; more com-

mon between the ages of forty to sixty, 53.7 per cent as compared with 3.6 per cent under the age of thirty, 13.8 per cent between the ages of thirty to forty, 21.3 per cent between the ages of sixty to seventy, and 7.6 per cent after the age of seventy years. The younger the patient the more likely is the disease to be of recent origin and the greater the likelihood for surgical intervention. Pregnancy is a common cause due to sedentary habits during this period and the upward pressure of the gravid uterus leading to stagnation of bile. Constipation is a frequent contributory cause and should be corrected early in life to prevent the onset of the disease, or as a corrective measure once the disease has become manifest. Spastic colitis should be corrected by the proper dietary and medicinal measures. Peptic ulcer is mentioned as a frequent complication, in this series however only three patients had both diseases.

It is often stated that cholecystitis begins in youth and becomes manifest later in life. The role of habits as an etiologic factor has been mentioned. Infections are frequent contributory factors; the history of previous attacks of typhoid fever; respiratory infections due to streptococci, pneumococci or influenza bacilli; infection due to members of the coliform group of organisms which have reached the gallbladder through the lymph or blood vessels; foci of infections located in the sinuses, teeth or tonsils. In the therapeutic management means of preventing such infection should be considered and the removal of foci of infection.

Syphilis occurred as a contributory factor in eight or 7.4 per cent of patients, the normal incidence of the disease in our population. Since syphilis is a great imitator of other diseases one should always consider the possibility of its presence. We seldom see the gummatous stage of syphilis of the liver, at least its frequency has remarkably diminished since the widespread use of serologic tests, yet chronic changes in the liver due to the disease may lead to symptoms suggestive of cholecystic disease. Unless secondary organic changes have occurred antisyphilitic treatment usually results in relief of symptoms. Tuberculosis of the gallbladder and primary malignancy, are uncommon conditions, more frequently involve the liver secondary to primary involvement of the pelvic and other abdominal organs, producing symptoms suggestive of cholecystic disease. Diabetes mellitus was found as a complication in two or 1.8 per cent of patients; a slight increase in the normal incidence of the disease in our population. Temporary glycosuria is not infrequent and disappears when diseases of the pancreas and liver are properly treated through medication and dietary measures.

The increasing incidence of heart disease is manifest in the large number of patients who suffer from hypertension, coronary artery disease and other cardiac disturbances; in this series fifteen or 14.0 per cent of 108 patients were so affected. The differentiation of cardiac disease from cholecystitis must always be made and the proper medication instituted; occasionally they occur together more particularly in the female over forty. Renal disease commonly accompanies cholecystitis for albuminuria is frequently present, appearing in 23 of 108 patients, or 21.3 per cent. The renal symptoms are not always severe and subside with proper medication.

In making the physiologic diagnosis one has to bear in mind the extent to which the biliary passages and the liver are involved, for dormant calculi may be productive of no symptoms, whereas calculi and active cholecystitis may require immediate operation. In this series seventeen or 15.7 per cent had calculous cholecystitis and fourteen or 13.0 per cent of patients suffered from cholecystitis, hepatitis and jaundice. Medical measures assist in preparing such patients for operation; repeated transduodenal lavage, proper diet and elimination, use of autogenous vaccines and bile acids. Occasionally in the older patient, a poor risk, such measures will alleviate the symptoms to such an extent that surgical measures need not be instituted. Particularly in the cardiac patient medical measures should be employed with this end in view, but unless such measures are successful surgical interference should be advised.

When one considers the functional capacity of the biliary organs, one must consider the extent to which this impairment affects the ordinary physical activities of the patient. Can he carry on without discomfort or should his activity be mildly or greatly limited? If he is unable to carry on any physical activity without discomfort, then medical measures should be instituted to prepare him for the eventuality of surgical procedures. Much depends upon the age, occupation and social position of the patient. When surgical procedures are indicated then the physician should not hesitate to advise them, for their neglect may lead to greater impairment in the future. This does not mean that every gallstone accidentally discovered in the cholecystogram need necessarily be removed, particularly in those past sixty years of age.

Much has been written about the proper diet for such patients. As a rule he has learned which food he can eat without discomfort and the regular standard diet list will be found satisfactory. Particular attention should be directed toward the correction of constipation, the regulation of the patient's habits, the moderate use of tobacco and alcoholics, the proper type and amount of exercise. He should be encouraged to adopt a more hopeful outlook on life. The drinking of more water, particularly on rising in the morning, frequently with the addition of small amounts of the commonly used preparations of

various salts, is of great assistance. Vaccines have not been effective although still employed by some. Before operation the storage of glycogen in the liver should be increased by the feeding of carbohydrates or by subcutaneous or intravenous injections of glucose or sucrose solutions. The jaundiced patient should be prepared by previously injecting calcium gluconate solutions intravenously, the preoperative transfusion of blood and the administration of vitamin K No. 2 and bile to reduce the prolonged prothrombin time of the blood.

SUMMARY

The therapy of cholecystic disease should be based upon the etiologic factors, the structural lesions and the altered physiological functions. Physicians should employ the method of non-surgical biliary drainage for its therapeutic value as well as the information to be gained through an examination of the various samples of bile. Lack of color sequence as a rule is indicative of pathologic changes in the gallbladder or biliary passages. In 62 of 66 patients some abnormality of the bile was found in those presenting symptoms suggestive of cholecystic disease. The importance of disease in neighboring organs is stressed when considering the therapeutic measures to be employed.

19 WEST SEVENTH STREET.

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Vitamin B in Treatment of Tic Douloureaux

The following is a report of results of vitamin B, in a case of tic douloureaux involving the inferior maxillary nerve:

The patient, male, aged 73, has had this trouble for about four years. I first gave him 40 grains each of calcium gluconate and brewer's yeast with some slight benefit; then I started him on vitamin B, giving him two tablets a day each containing 1 mmg. of vitamin B, with six hypodermic injections of vitamin B, each ampule containing 1 mmg. or 500 units. These injections were given every fourth day and each one took the place of the tablet that was to be taken at that time.

This was a very typical case of tic douloureaux and after six weeks' treatment he is practically free from pain.—F. A. Shuffleton, M.D., St. Mary's, Ohio.

Appendicitis

There are five important points which we practice in the treatment of appendicitis:

1. Operate at any stage, whether peritonitis or abscess is present or not, as soon as the diagnosis is made.

2. Use the McBurney incision, be as gentle as possible in the manipulations, and always remove the appendix even if bound down in an abscess. We have not failed to remove the appendix in the last eleven years.

3. No sponging or packing of gauze around a septic appendix with an abscess or peritonitis. Suction, however, is freely employed. Sponging with gauze tends to force septic products into the loose tissues around the posterior peritoneum and promotes sepsis, whereas suction draws the septic products out.

4. The stump of the appendix is treated as simply as possible, merely ligating it, severing the appendix with the electric cautery, and cauterizing the stump with pure carbolic. The ends of the ligature on the stump of the appendix may be threaded in a needle and passed through adjacent peritoneum-covered fat to protect the stump from the drainage tube or to hasten the absorption of the stump, but no suture is placed in the cecum. H. E. Robertson, Chief Pathologist of the Mayo Clinic, said some time ago in a personal communication, ". . . for a long time I have been, in season and out of season, inveighing against the custom of burying the stump of the amputated appendix. It strikes me as wholly illogical and, worse than that, a dangerous procedure. The well-known ostrich with his head in the sand hasn't very much on this custom.

5. The cecum and colon are given physiologic rest. This cannot be accomplished by enemas or proctoclysis, which add a burden to the colon. The patient is supplied with water, the electrolytes and some calories by the continuous intravenous injection of 5 per cent dextrose in Ringer's solution.—J. Shelton Horsley, M.D., J. Shelton Horsley, Jr., M.D., and Guy W. Horsley, M.D., Richmond, Va.; Va. Med. Monthly, Vol. 65. No. 4, April, 1938.

Recent Developments in Chemistry

Certainly for a given location in the renal tubule and in the liver we have to accept the observation that when such fixed epithelial cells are subjected to a sufficient degree of injury which connotes susceptibility that a repair process may be instituted that results in the formation of a different type of cell in such locations which has acquired a high degree of resistance not only to the chemical agent which inflicted the injury and precipitated the atypical repair process but a resistance to chemical bodies of an entirely different chemical order from the injurious agent.—Wm. deB. MacNider, M.D., Chapel Hill, N. C.; N. Y. State Jr. of Med., Vol. 38, No. 6, Mar. 15, 1938.

HEMORRHAGE FROM A NOSE AND THROAT STANDPOINT

By HOMER V. WEAVER, M.D., Canton, Ohio

AN otolaryngologist is interested in the subject of hemorrhage because the field of his specialty is a common site of bleeding. The blood clotting elements are found both in the plasma and cellular elements of the blood. Tendency to bleeding may be due to a disturbance either in the quality or quantity of these elements or to a change in the permeability of the endothelio-vascular system. The organs producing these elements, the liver and bone marrow or vascular system may be disturbed in their function by hereditary deficiencies, glandular insufficiency, malnutrition, allergic conditions, toxins of acute or chronic infections, vitamin deficiency or chemical toxins.

The history of a patient is of great value both in diagnosis and in evaluating the risk in proposed operative procedures.

The following laboratory and clinical tests are of aid in diagnosing bleeding tendencies. Red, white, differential and platelet cell counts, coagulation time, bleeding time, clot retraction time, tourniquet test with a microscopical examination of the nail bed, blood pressure in adult patients.

Local conditions in the nose which may lead to vascular damage are trauma, accidental and operative, defects of the cartilagenous septum, atrophic rhinitis, varicose veins, talangiectases, presence of foreign bodies or sequestrae in nasal cavities, tuberculous or syphilitic ulcers, tumors, perforating ulcers, acute and chronic infections.

The emotional stress accompanying bleeding causes nervousness and often a substantial increase in blood pressure. The patient will frequently lie on the back and either swallow the blood or go through violent exertion to remove it. These conditions help prevent spontaneous arrest of bleeding. Inspection of the patient and the quality and rapidity of the pulse is of help in determining the state of the vascular system. The position of the patient should be such that the drainage will be anteriorly. The bleeding point should be found if possible. Kiesselbach's area should be examined first as approximately 90 per cent of the bleeding takes place in this location. Pressure over this area is all that is required in mild degrees of bleeding in this location. Recurring bleeding should be treated more permanently. Goodyear[2] recommends an application of 50 per cent silver nitrate held against this area after 10 per cent cocain anesthesia. Spencer uses actual cautery, Roberts, Monsel's solution (Ferric subsulphate), others salt pork tampon, tricholoracetic or chromic acid bead. The secondary swelling following the use of these agents helps prevent recurrences by pressure on the vessels.

Packs will usually control bleeding where the source cannot be found. Postnasal tampons are sometimes necessary if the bleeding point is posterior and inaccesible. The packs should be removed in 24 to 48 hours, clean packs should be ready when the old ones are removed to avoid confusion and loss of blood in case of recurrence. The danger of middle ear infection from postnasal packs should be kept in mind and their use eliminated as soon as is practicable. Caesar Hirsch[3] recommends ligature of the internal maxillary artery through an opening in the anterior wall of the maxillary sinus. He feels that this procedure is a simple and effective method of controlling severe nasal bleeding and can be done with local anesthesia.

The study of the case from an etiological standpoint should be made as soon as the active bleeding is controlled. This should consist of blood pressure, examination for local anatomical defects or pathalogical lesions. Vigorous blowing or rubbing of the nose should be discouraged. Treatment should be instituted to relieve the local cause.

BLEEDING FROM THROAT

Operative trauma, infections and tumors are the commonest causes of throat bleeding.

Post-tonsillectomy bleeding may be either immediate or delayed. Bleeding at the time of operation is more profuse if the pharyngeal muscles are traumatized. Dense scar tissue surrounding the tonsil lessens retraction of the vessels and makes bleeding more probable. Much trouble will be avoided, both for the surgeon and his patient, if all bleeding is stopped before the patient leaves the operating room. The adenoid area may be a source of trouble and most frequently because of an incomplete adenoidectomy. This area should be examined directly by retraction of the palate for evidence of bleeding[2]. The position of patient should be such that no blood will be aspirated. Pressure with sponges in the fossae and the use of suction keeps the throat

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clear for breathing. The pressure will in many cases be all that is necessary to stop the bleeding. Suture or ligature is the most certain way of preventing recurrence. The patient's position when recovering from anesthesia is quite important. A position with the patient on the side with the lower leg extended and upper leg flexed allows easier breathing and permits any drainage to flow from angle of the mouth. Keeping the patient quiet with sedatives, use of an ice collar and keeping visitors out, all help lessen the tendency to bleed. In order to have satisfactory control of conditions hospitalization is necessary. Postoperative bleeding in children is most frequently diagnosed only after the patient vomits a considerable amount of blood and the physician has left the hospital. Nurses can be trained to watch the larynx for evidence of swallowing and the condition recognized earlier. The general condition of the patient should be noted at once as to pallor and quality and rapidity of the pulse. The patient should be placed on the side of the bleeding and a sponge may be held firmly in the fossa. The sponge may be moistened with peroxide, thromboplastin, dilute silver nitrate (1 per cent) tincture benzoin compound. A method which has been quite helpful and with no noticeable after-effect is a sponge saturated with adrenalin on which tannic acid crystals are dusted. Any of these drugs, to be effective, must be placed against the fossa after the clot has been removed. This can be done with a laryngeal mirror, sponge or forceps. These procedures, although not pleasant, do not cause the patient great discomfort and traumatize the throat very little. Suturing under general anesthesia is preferable if these methods fail or if the general condition of the patient is such that no more blood can be lost.

There are numerous suture instruments on the market but none have proven as satisfactory as a round, heavy, curved needle. Needle holders such as Hegar-Mayo or Lakeside are quite satisfactory. Tying over a hemostat is not quite as satisfactory because of a tendency to come loose. A superficial application of a clamp is helpful in inserting the first suture. This suture, if uncut, can be used to retract the fossa for further sutures if necessary. Clamping tissue unnecessarily should not be done as necrosis is caused by a tight clamp.

Secondary bleeding after several days is usually caused by a clot remaining in the fossa and softening underneath it. These clots can usually be prevented by the use of hot throat irrigations with normal saline in a fountain syringe twice daily. A gargle of hydrogen peroxide or other oxidizing agents will prevent this clot formation. Occasionally a patient will suck on his throat while sleeping after the soreness leaves and bleeding results. These secondary, or late, hemorrhages are usually not severe and easily stopped.

Bleeding from a tumor, retropharyngeal, peritonsillar, or other abscesses, can be very severe either after spontaneous rupture or incision. The internal carotid sometimes is involved in the necrosing process and leads to fatal hemorrhage. The ligation of the common carotid on the side of the lesion is to be recommended and this after the first severe bleeding[2]. Severe bleeding from the ear is usually of venous origin and may best be controlled by occlusion of the sigmoid sinus if the severity justifies such a procedure.

SYSTEMIC TREATMENT

The systemic treatment of the patient depends on the diagnosis. Morphine is one of the best drugs for hemorrhage because of its sedative effect and lowering of blood pressure. Transfusions are of great value for acute loss of blood and are helpful in all other types of hemorrhage with the exception of purpura hemorrhagica[2]. The blood should be typed and preferably given without citrate, and should be tested serologically for syphilis. Blood can be given intramuscularly without typing with benefit. Glandular deficiencies should be treated when indications exist. Nutritional disturbances should be corrected and allergic sensitivities eliminated. Elimination of toxin, either from acute and chronic infections or from chemical poisons, involves an examination of the teeth, sinuses, tonsils, intestinal tract and a study of the occupation and habits of the patient. Osler's disease and other diseases which affect the capillary permeability have been treated satisfactorily by moccasin snake venom[5]. The dosage is .5 cc. of 1-3000 solution increasing to 1 cc. Children receive .3 to .8 cc. The injections are recommended twice a week. No undesirable symptoms have been reported. Fibrinogen 2 cc. ampules for subcutaneous injection or 3 cc. oral can be given with benefit.

Splenectomy is indicated in thrombocytopenic purpura in cases where the blood-forming elements are not badly damaged and the severity of bleeding justifies it.

Other hemostatics which are recommended are calcium chloride gr. XX in milk or 10 cc. of 10 per cent calcium glucouate intravenously.

Gelatine 100 to 200 cc. of 1 or 2 per cent solution intravenously in physiological salt at 37° C or orally 30 cc. of 10 per cent solution three times daily.

Pituitary extract .5 cc. subcutaneously is given for capillary oozing.

Congo red has been used in vascular dyscrasias in 1 per cent aqueous solution intravenously in doses 5, 10 and up to 20 cc.

Sulfanilamide in streptococcus infections has

been found helpful in controlling the infection and the bleeding sometimes associated with it.

SUMMARY

1. The local treatment for hemorrhage from the nose and throat consists of pressure, astringents, cautery and ligature and the correction of any local pathology.

2. Systemic treatment for hemorrhage from the nose and throat recommended consists of morphine, transfusions, blood serum, snake venom, calcium salts, fibrinogen, splenectomy, pituitary and ovarion extracts, gelatin, congo red and sulfanilamide, their indications to be determined by diagnosis and judgment of the surgeon.

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Anemia

The general administration of liver extract in hypochromic, hemolytic or the anemas due to increased blood destruction is frequently useless and always expensive. In the hypochromic anemias iron is the important therapeutic agent. The average daily dose of various common iron preparations to insure maximum effects is reduced iron 3 gm., mass of ferrous carbonate 4 gm., ferric and ammonium citrates 6 gm. and ferrous sulphate 1 gm. In the presence of achlorhydria the use of the soluble forms such as the citrates and the ferrous sulphate are preferred. Because of the convenience, smaller adequate dose, and better tolerance, the trend is towards the use of ferrous sulphate, which is both inexpensive and therapeutically active and can easily be administered in capsules. In the anemia due to scurvy, all symptoms as well as the anemia respond specifically to the administration of Vitamin C. Idiopathic disturbances of the blood forming organs such as the hemolytic and hemorrhagic groups mentioned are not amenable to drug therapy as far as the anemia is concerned, but are treated symptomatically or surgically as by splenectomy in chronic hemolytic icterus or thrombocytopenic purpura. No amount of liver extract or iron will influence the anemia of aplastic anemia, purpura, agranulocytosis or leukopenia.—Eugene L. Sielke, M.D., R. I. State Hosp. for Mental Diseases; R. I. Med Jr., Vol. XXI, No. 4, April, 1938.

Importance of Ocular Examinations

In the earlier decades of life the eye like other organs of the body, is subject especially to acute inflammatory conditions. As such affections are usually accompanied by pain, redness, and at times rapid lowering of the vision the person so affected is conscious of his troubles and at once seeks advice. After the fourth decade, however, frank inflammatory conditions are less frequent, but insidious inflammations and degenerations which are frequently without subjective symptoms are more common and creep on unnoted by the patient. Hence the necessity for ophthalmoscopic examination at this time of life.

Perhaps nowhere else in the body are conditions more favorable for the observation of pathology in the living tissues than in the interior of the eye. Here, with the ophthalmoscope, we see under considerable magnification a transparent sheet of nerve and connective tissue, the retina; overlying but not hiding a structure almost entirely composed of blood vessels, the choroid. The slightest alteration in the transparency of the retina, the result of edema, exudation, coagulation-necrosis of the ganglion cells, or hemorrhages, becomes apparent at once; and in the choroid, sclerosis, atrophy of the vessels, and hemorrhages are plainly visible. The vessels of the retina and choroid are subject to the same changes as vessels elsewhere in the body and we easily recognize with the ophthalmoscope spasm of the vessels, embolism, thrombosis, aneurism, periphlebitis, periarteritis, endarteritis, angiosclerosis, and changes in the quantity and quality of the blood contained in the vessels, especially polycythemia, anemia, hyperemia, pernicious anemia, and lipemia retinalis (Jackson). In this category are mentined only conditions which, with one or two exceptions, occur with greater frequency after middle life, so as to emphasize the importance of an ophthalmological examination at this period.

One of the annoying tell-tale effects of increasing years is a lessening of the power of altering the focus of the eye which enables one to see at reading distance as well as at far distance. The annoyance caused by this change comes earlier to the far-sighted and in general later to the near-sighted, than to one who has a normal focused eye for distance.—William Zentmayer, M.D., Philadelphia, Pa.; Del. State Med. Jr., Vol. X, No. 3, Mar., 1938.

The only person to whom a Doctor can say exactly what he thinks about another Doctor is his wife. That is why practically all Doctors are married.—Joyce Dennis.

PLACENTA ACCRETA

By ARTHUR G. KING, M.D., M. Sc., CINCINNATI, OHIO

UNDER the name of "Retained Placenta" the older writers included all conditions in which the completion of the third stage of labor was delayed. Jacob Trush[1] of Cincinnati, in 1877, described four causes: atony of the uterus, irregular spasm of the uterus, too large a placenta, and "morbid adhesion of the placenta". Clinically a differential diagnosis must still be made among these four conditions, the last of which is the least common but most dangerous. It is now termed "placenta accreta" or "adherent placenta".

A brief review of the physiology of early pregnancy shows that the trophoblastic layer of the embryonic vesicle erodes a bed or nest in the previously prepared uterine mucosa or decidua. If the decidua is not properly developed, early abortion occurs. But under normal conditions the vesicle buries itself completely in the decidua and the eroding process continues to the spongy layer where it is arrested by a mechanism as yet unknown. The vesicle grows, carrying the covering portion of the decidua with it until the latter fuses with the decidua vera on the opposite side.

At the conclusion of the second stage of labor there is a separation along a clearly defined plane, namely the loose spongy layer, at the point where the early erosive process was stopped. Simpson[2] in 1836 postulated a fatty degeneration which so weakened the utero-placental attachment that but little force was needed to effect the severance, but it was Langhans[3] who described in 1875 the plane of separation outlined above.

In 1889 D. Berry Hart[4] first reported the microscopic pathology of placenta accreta, stating: "The cause of non-separation depended on the defective development or the pathological condition of the mesh-work or spongy layer where the normal plane of separation for the placenta lies. . . . There was an almost complete absence of epithelium . . ." Subsequent pathologists have done little but to elaborate on this description. Some have chosen to classify as "placenta increta" those cases where the erosive process of the trophoblast has penetrated deeply into the muscularis and even to the serosa. It is known that placenta accreta may be only partial. Microscopic studies have shown a number of minor changes and variations, such as, poor development of the hyaline layers of Nitabuch and Rohr, invasion of wandering chorionic cells, chronic inflammatory processes in the muscularis, drawing up of myometrial tissue into the decidual septa, and particularly defects in the decidua vera, which have been stressed by Irving and Hertig[5].

On the clinical side, cases of adherent placenta have been reported since antiquity. In modern times, Simpson[2] in 1836, Hagar[6] in 1862, and in this country, Trush[1] in 1877, described what must have been true cases. In those with fatal outcome, the causes of death were either hemorrhage after efforts at manual removal, peritonitis from perforation in the same manipulation, or sepsis. In the surviving cases absorbtion of the placenta occurred, and normal menstruation and even pregnancy supervened. The first case defined as placenta accreta is that of Ahlfeld in 1889. Irving and Hertig[5] added 18 to the 86 cases previously reported, and the cases of Tomaiuoli[7], Matthieu[8] and the three presented herewith bring the total to 109.

The **incidence** is given variously by authors as from 1 in 40,000 deliveries to 1 in 2,000 deliveries. A higher incidence is reported in recent years, particularly from maternity hospitals with a large consultative practice. It is not unlikely that many cases of partial placenta accreta are missed, since absorbtion of placental tissue is possible, often without symptoms. Although Solomons[9] states categorically that the condition never occurs in primigravidae, a few exceptions are known. There is almost invariably a history of some sort of uterine manipulation or difficulty.

The **diagnosis** is made by (1) the absence of classical signs of separation of the placenta (rising of the fundus, lengthening of the cord, bleeding) and (2) failure to find a plane of cleavage between placenta and uterus on manual exploration.

The **treatment** can now almost be standardized. Without question abdominal supravaginal hysterectomy with blood transfusion is indicated. The

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Appreciation is expressed to Dr. Mortimer Herzberg for assistance with the gross and microscopic pathology and to Dr. Daniel J. Davies for permission to present Cases 2 and 3.

mortality (Table 1) is markedly lowered if no serious effort at manual removal has been made after the diagnosis is established.

TABLE I

Mortality in the 109 cases of placenta accreta, by method of treatment.

Method	No. Cases	Deaths	Mortality	S.E. %
Placenta allowed to remain	3	2	67%	(27.0)
Manual or instrumental removal	34	20	59%	(8.4)
Some manual efforts followed by hysterectomy	48	11	23%	(6.0)
No manual efforts, hysterectomy	24	1	4%	(4.0)

The etiology is far from certain although it is agreed that fundamentally placenta accreta is due to a disturbed endometrium. Kwartin and Adler[10] have advanced the theories of (1) hypoplasia of the endometrium, (2) hypertrophy of chorionic elements, (3) insufficient anti-ferment production against the erosive power of the trophoblast. Irving and Hertig suggest a hormone insufficiency. The older obstetricians postulated a mechanical factor. In the past history of many cases is found manual removal of the placenta and it was assumed that damage was done in the process. A more likely explanation is a common factor responsible for both the difficulty in the previous delivery and the placenta accreta. Other suggestions were: abortion, infection of the endometrium and myomata. Probably the most popular of all was too vigorous a curettage.

Still another mechanical factor, which has received scant attention, is a previous cessarean section. It is, of course, only in recent times that the operation has become frequent enough to enter the picture. And yet a previous cesarean section is given as the probable cause of the adherent placenta in four cases: Lehman (1924), Kwartin and Adler (1930), Smith (1933), and Capecchi (1933). Of the three new cases to be reported herewith, two had a history of a previous cesarean section with myomectomy.

CASE REPORTS

Case 1—A 33-year old hypopituitary type of woman had had a classical section (with the removal of a few small fibroids) some eight years before because of cephalo-pelvic disproportion. The abdominal wound broke down, and after drainage had been established, healed with a marked defect in the fascial layer, presenting an incisional hernia which required the wearing of a truss. She became "pregnant" for the first time afterward in 1935, when a Friedman test by a competent laboratory was positive. The diagnosis was changed to pseudocyesis, however, when an X-ray at eight months failed to show fetal parts and another Friedman test was negative. A definitive pelvic examination had never been possible because of her obesity, and it is still moot whether she had been pregnant and aborted or had not been pregnant at all. After five months of catamenia she began to lose weight and ceased to menstruate except for some slight irregular spotting. Although continuing to lose weight (a total of 20 lbs.) the contour of the abdomen changed, and pregnancy was correctly diagnosed. Shortly before calculated term laparotomy was done.

On opening the abdominal parietes which consisted of skin and adhesions only, the uterus was found presenting a bulge or herniation some 8 cm. in diameter. On reconstructing the findings later it was apparent that this bulge formed the incisional hernia referred to above. The uterus was opened cephalad and laterally to the hernia and portions of the placenta were pushed aside to deliver successfully a living 6 lb. 12 oz. child. It was then found that the bulk of the placenta occupied the uterine herniation and was firmly adherent. A large blood transfusion was given and a supra-vaginal hysterectomy done at once, with no attempt to repair the abdominal hernia. Recovery was relatively uneventful.

In examining the specimen it was found that the outpouching occurred about in the center of tht old line of incision. One-half of the placenta completely filled the pouch more or less solidly. The placenta was firmly adherent and efforts to remove it brought away part of the muscular coat which was very thin or else shredded the placenta. The remainder of the placenta was normally separated from the uterine wall which showed no abnormalities. There was no evidence of myomata.

Microscopic sections through the pouch portion showed the muscular layer to be extremely thin, and in some places the individual muscle cells presented marked degenerative changes. The muscularis was deeply invaded by villi, occasionally directly to the serosa. In the muscularis a few isolated nests of villi were observed. The decidua was entirely absent. Hyaline striae (Rohr's) were well developed and very irregular. There was an invasion by large trophoblastic-like cells and a few chronic inflammatory cells were seen surrounding the vessel walls in the muscularis and serosa.

Case 2—This woman, from the service of Dr. Daniel J. Davies, was 34 years old, pregnant for the second time. Her first labor, four years before, had been long and ineffective, and was terminated by a low classical cesarean section for cephalo-pelvic disproportion. At the same time a small fibroid was removed. The post-operative course was stormy, with definite wound infection. Just before term of the present pregnancy, otherwise normal, she began to bleed moderately, and a second classical section was done. After the extraction of the living child the placenta was found in the lower uterine segment, and very adherent to the wall particularly at the site of the old scar. Before much could be done beyond making the diagnosis, the woman went into shock and died suddenly despite the usual methods of stimulation.

At autopsy the placenta was found adherent over an area of 8 x 7 cm., in intimate contact with the myometrium and the line of the old scar which was not more than 2 mm. thick. Part of the placenta had invaded the upper portion of the cervical canal where it appeared to have undermined the cervical mucosa.

The microscopic sections demonstrated that in

contrast to areas where normal separation had occurred, the decidual reaction in the region of the "accreta" was entirely absent. The hyaline layer was irregular. The chorionic villi were applied in many cases directly to the muscle which varied markedly in thickness. There were a number of chorionic giant cells scattered through the muscle and fibrous tissue.

Case 3—This woman, from the obstetrical service of the Cincinnati General Hospital, was, like the other two, 34 years old. She had begun menstruating at the age of 11, and although she had not had a previous cesarean section, this was her tenth pregnancy. After eight full term parturitions in rapid succession, she had a miscarriage in 1933 (5 years ago) at 2½ months' gestation. This abortion she ascribed to "a kick in the abdomen". After a four-year interval she became pregnant again, and at about eight months, began to bleed profusely. A correct diagnosis of central placenta praevia was made, and a classical cesarean section performed. After delivery of the infant (which subsequently died) the placenta did not separate despite oxytoccics, massage, and traction. Finger and gauze dissection were equally ineffective, and a hysterectomy was done, the woman surviving.

The specimen, with the placenta forcibly detached, showed some of the lower part of the body and almost all of the lower segment denuded of endometrium, with patches of placental tissue still adherent to the muscle. The microscopic sections demonstrated placental villi irregularly separated from the muscularis by a layer of hyaline markedly invaded by multinucleated trophoblastic cells, many of which penetrated deep into the muscularis. Occasional decidual cells were seen, often surrounded by fibrous tissue, but a distinct endometrial layer was absent in the region of the placenta.

There is an amazing parallel in the first two of these three cases: a previous classical cesarean section and myomectomy followed by a convalescence suggesting wound infection. The implantation and the accreta in both cases were chiefly in the line of the old scar. In case 3 the woman had many pregnancies at short intervals, the last terminating in abortion under suspicious circumstances. Exhaustion of the endometrium might well be postulated. In cases 1 and 3 there appeared to be some endocrine abnormality, in the first a definite dyspituitarism, and in the latter an early menarche and an unusual fecundity.

In discussing the cause of placenta accreta three factors stand out: (1) an endocrine disturbance which depresses one of the normal functions of the endometrium (2) a mechanical or traumatic factor which produces a **locus minoris** resistentiae, (3) the chance that implantation will occur at this point. The fortunately low incidence of this depressing complication may be due to the statistical improbability of all three factors coexisting.

It is predicted that placenta accreta will become more common. The widespread and almost-indiscriminate use of endocrines may produce a deleterious effect on the decidual function of the endometrium; further, the cure of certain types of sterility with endocrines may not be complete, in that pregnancy may occur in a uterus that is not fully prepared for physiological implantation. The increasing number of cesarean sections, many with an unrecognized low grade uterine infection, will leave more women with a damaged endometrium. Finally it is hoped that more physicians will watch for and recognize placenta accreta when it occurs.

SUMMARY AND CONCLUSIONS

(1) Three cases of placenta accreta are presented, bringing the total number of reported cases to 109. Two of these cases followed previous cesarean section and myomectomy with post-operative infection. The third was in a young para-X whose last pregnancy terminated in an abortion.

(2) The history, incidence, mortality, diagnosis, and pathological findings are discussed. The treatment can be standardized on sound statistical evidence as: hysterectomy with no efforts at manual or instrumental removal of the placenta.

(3) It is believed that placenta accreta is due to a mechanical, traumatic, or infectious insult to the endometritum combined with the chance that implantation will occur at the disturbed area. Endocrinopathy must be considered as a possible factor.

(4) Among the traumatic factors serious consideration must be given to previous cesarean section, which was a likely etiology in at least 6 per cent of all the reported cases.

(5) It is predicted that placenta accreta will become more common, particularly with the increased frequency of cesarean section.

(6) The possibility of placenta accreta should be considered in any woman with a history of an endocrine disturbance, an abortion, or frequent pregnancies in rapid succession, and more particularly, a previous cesarean section. This possibility should militate against unnecessary abdominal deliveries, but might well bolster the argument for repetition of cesarean section.

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SPINAL ANESTHESIA: REPORT OF 350 CASES

By W. M. JOHNSTON, M.D., AKRON, OHIO

UNFORTUNATELY in the practice of medicine under our present set-up, neither in medical school nor during our internship is there an opportunity for the proper training of physicians as anesthetists. Since our modern hospitals have house anesthetists many of our modern physicians rightly do not think it worth while to train themselves as expert anesthetists, or to buy the equipment necessary for such a practice.

However, I am interested in good anesthesia and that is one of the reasons why I use spinal anesthesia. This is a brief review of 350 successive spinal anesthesias which we have used in the last five years. While this is not a large number as compared with the reports of many clinics, yet these are all private cases. Therefore there is nothing experimental about them in any way. We have not been influenced by the enthusiasm of some well meaning House officer or others, which unfortunately often comes upon the best of us in treating service cases.

Many articles on spinal anesthesia have been written in the medical literature by many different authors in the last five years. Yet we still have some criticisms of its use and there are still many physicians who rarely if ever use it and often cannot do a spinal puncture. At a recent medical meeting I heard a physician state on the floor that he thanked God he had not believed in the use of spinal anesthesia. Following inquiry from him as to the number of cases he had tried its use, he replied that he had not tried it on any case. Naturally such criticism is not constructive in any way and adds nothing to the progress of surgery or anesthesia.

Approximately 60 per cent of these anesthesias were administered personally at the time of the operation. The other 40 per cent by house officers under my direction or by referring physicians who had previously demonstrated their ability to give spinal anesthesia.

In spinal anesthesia the surgeon or the one who administers the anesthesia should understand the two possible complications that in my opinion are the only ones to be feared. These are (1) respiratory paralysis (2) fall in blood pressure. The higher the anesthesia the more nearly is respiratory paralysis approached and the greater is the fall of blood pressure. So-called perfect spinal anesthesia for every type of intra-abdominal surgery may be accomplished by the use of large dosage and volume. This is **not** good anesthesia. One of the qualities of a good anesthetist is his ability to limit the upward extension of the anesthetic solution consistent with the height of anesthesia desired for the type of surgery contemplated. In my experience no type of surgery should be done above the diaphragm under spinal anesthesia. If this rule is followed we need not fear respiratory paralysis. The factors which control the height of anesthesia are (1) dosage, (2) volume, (3) site of injection, (4) speed of injection, (5) specific gravity of solution, (6) position of patient. Also, and very important is the **condition**, age, and **weight** of patient.

The inguinal region receives its sensory supply from the twelfth thoracic nerve. The area about the umbilicus receives its nerve supply from the tenth and the areas about the ensiform from the seventh thoracic nerve. Satisfactory anesthesia for upper abdominal surgery must extend to and involve the fifth thoracic segment since the upper recti are innervated from this segment. Anesthesia above the segment begins to involve the cardiac nerves whose origin is in the first, second, third and fourth thoracic segments. This is just another reason why I adhere to my contention that under spinal anesthesia work should be done below the diaphragm.

However, upper abdominal surgery is very satisfactory as in this series there are 10 cases of operation on the stomach from gastrostomy to resection and 33 cases of operation on the gallbladder and ducts, but we always kept in mind the factors before mentioned which control the height of anesthesia.

Meek and Seekers have shown that the barbiturates give a high degree of protection against the cardiac effects of ephedrine. The same authors have shown that if ephedrine is given after atropine the reflex effects are eliminated and tachycardia follows immediately. Atropine hastens and intensifies the pressure effect of ephedrine but shortens its duration. We do not use atropine with the preoperative hypodermic. Remembering these facts and from the experience acquired in our first 100 cases we have now evolved a technic which we consider absolutely safe and will continue its use routinely. I will

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Submitted February 14, 1938.

review it briefly for you. Not that I consider it better than other methods, but it is one that I have learned and know that it gives good results.

Preliminary medication is sodium amytal grs. III, the night previous to operation. And grs. VI two hours before operation and morphine without atropine is given one-half hour before operation. If the case is an emergency, we can give a small amount of sodium amytal intravenously previous to operation. This removes any anticipation or fear of anesthesia that the patient may have and also continues the effect of ephedrine. We use 2 cc. of novocain containing ephedrine as a local anesthesia which practically eliminates any pain at the site of spinal puncture; and since it contains ephedrine we have had to use adrenalin only five or six times in this series during the operation and then I suspect that it was used to control the blood pressure of the observing anesthetist as I have never seen any real distress because of low blood pressure in any of these cases either during or after the operation.

For the actual spinal anesthesia we use two preparations. Neocain for its quick action and pantocain for its prolonged action. The dosage is determined as we said previously by the location of the operation, the length of the operation, the age of the patient, the size of the patient and his general condition. For short operations, for amputations, and work below the anterior superior spine, in the aged, and in all short operations, 100 mgs. of neocain is sufficient, although anesthesia is rapid and lasts for only about 45 minutes. Where more time is necessary and when a higher level of anesthesia is desired we use in addition, pantocain from ½ to 2 cc. This latter amount is used for upper abdominal surgery in a large and not elderly patient. With pantocain the operation may be prolonged for nearly two hours. The specific gravity of these two solutions is 1.007 which is that of the average spinal fluid.

After trying many kinds of anesthesias in the first 100 cases of this series, we have now used neocain and pantocain exclusively in over 250 successive cases. A spinal puncture needle of very small caliber is used and the puncture made from the second to fourth lumbar interspace again depending on the height of anesthesia desired. This puncture is made with the patient lying on his side with the bevel of the needle up, as has been demonstrated by Pete. This technic prevents many of the post-operative headaches. The puncture is made immediately after the use of novocain and ephredine injection for local anesthesia. Only enough spinal fluid is removed to dissolve the crystals of neocain. We do not practice ballotment now. We do not lower the head until the height of anesthesia is established. After operation the patient is returned to his room. An intravenous of 1000 cc. of glucose is administered with the foot of the bed elevated for two hours. In the routine operation the patient is allowed to take fluids as desired.

If the height of anesthesia is maintained, in my opinion there are only three real contraindications to spinal anesthesia. (1) It should be confined to work below the diaphragm. (2) Infection at the site of the spinal puncture. This speaks for itself as obviously we would not want to do a puncture through an infected area. (3) Intracranial or intraspinal hemorrhage. Naturally we would not desire a spinal puncture in this type of case. Otherwise, I would advise its use in any other condition. Other contraindications have been mentioned. Some advise against its use in children, even going so far as to state that it effects the sympathetic nervous system. Personally, I have had very little experience with the anesthesia in children. However, Dr. J. Lewis Auster of New York City in the Medical Record of September, 1936, reports its successful use in 53 successive poor risk surgical cases in children.

Others have said that it is contraindicated in the aged. On the contrary I have found it very useful in the aged. But remember that we should use a small dose in the aged. Just as we should limit the dose of anything in the aged. With small dosage the aged tolerate spinal anesthesia better than any other type of hypnotic or anesthesia.

Hemorrhage has been mentioned as a contraindication. In a former publication of mine in the *American Journal of Surgery* on Ectopic Pregnancy, I attempted to show that this was not true. In this series there are six cases of ruptured ectopic pregnancy in which we used spinal anesthesia, and all of whom made excellent recoveries. One case I can recall distinctly, one in which we were hardly able to obtain a systolic pressure reading pre-operatively but returned to normal as soon as the auto transfusion was introduced. The answer in these cases is as before: The height of anesthesia; with small dosage the blood pressure is not affected.

O'Shaughnessy and Thomas in the *British Journal of Surgery*, January, 1935, even advise the use of spinal anesthesia in cases of shock rather than any other type of anesthesia and report excellent results.

In this series the only complication which I have had are postoperative headaches in about 2 per cent of the cases. With one exception these were in minor cases which did not remain in bed over 48 hours. And since in routine spinal punctures there are approximately 20 per cent headaches, obviously these headaches are not due to the anesthesia. They all cleared up in a few days. In the one case the headache persisted for six weeks and was finally cleared up by medical

treatment of the referring physician. We were never certain whether or not the spinal anesthesia was the real cause in this case.

Some of the advantages of the anesthesia over general anesthesia can best be appreciated by contrasting the appearance of two cases, one under general and the other under spinal anesthesia. The lack of dehydration, the ability to take a diet, the normal chart reaction, the absence of postoperative disturbance; the good appearance of the case on which spinal anesthesia has been used in striking.

Many of the diabetics and chronic nephritics and other bad risk cases in this series would not have survived under a general anesthetic. In abdominal surgery the relaxation is so marked that we now sometimes shudder when we have to wrestle with intestines under a general anesthetic and naturally it is worse for the patient than it is for us when it is so simple under spinal anesthesia.

Spinal anesthesia is indicated in the presence of pulmonary disease or bronchitis, bronchietasis, empyema, active tuberculosis, and asthma. It is indicated in amputations of the lower extremities from any cause. As regardless of the cause no rapid operation is necessary under this type of anesthesia. Operations on the gallbladder and especially bile ducts; open reductions of fractures such as those of the femur are much simpler under spinal anesthesia. It is the anesthesia of choice in transurethreal surgery, strangulated hernias, and acute intra-abdominal surgery. In patients with intestinal obstruction the use of spinal anesthesia should be almost mandatory.

A fact that is often forgotten by us is that in all reports of the use of spinal anesthesia many of the cases were poor risk ones and many of them were cases in which the surgeon was afraid to use any other type of anesthesia. If we would consider its use for these bad cases, we should consider its use still more, in the average case.

It causes no discomfort to the patient. In this series it happened that there were two physicians, and we were especially interested in their reactions. They both told me that there was absolutely no discomfort or pain and that they would never consider any other type of anesthesia if they had to have any further operations. Many other patients have volunteered the same information.

The anesthesia can be repeated without ill effects to the patient. In this series we had one case of intestinal obstruction due to carcinoma of sigmoid upon which we did a colostomy on admission and later a Mikulicz resection and later closure of abdominal opening. Two and one-half years later repair of postoperative hernia was done; in all of which we used six spinal anesthesias with no ill effects to the patient.

In this series of 350 cases there were five deaths in the hospital. One of these was an exploratory operation for carcinoma of stomach where advanced metastasis was found. Two were in patients of 78 and 80 years, respectively, with diabetic gangrene. And the other two were in advanced intestinal obstructions in which the conditions were hopeless. None of these deaths were due to spinal anesthesia. However, I can say without fear of contradiction that this mortality rate of approximately 1 1/3 per cent would have been greatly increased had we used general anesthesia throughout. Therefore it has been a life saver in many of the cases.

In conclusion we would like to state that spinal anesthesia should be used in all cases where complete relaxation and exposure are indicated. It is found to be especially useful in diabetes; where there is disease of the kidneys; active pulmonary tuberculosis; amputation of extremities; bronchiectasis; empyema and asthma. It is of great value in hysterectomy, in large pelvic tumors, also surgery of the bladder; in resections of the colon; and in the surgical repair of all types of hernias. It has great advantages in amputations of the lower extremities and in all cases where there is intestinal obstruction it is almost mandatory.

If the contraindications which we mentioned are remembered, if the height of the anesthesia technic which we explained is followed and if used especially in the types of cases outlined, we believe that all surgeons would find great use for spinal anesthesia and would save a great many lives thereby.

204 METROPOLITAN BLDG.

Protomine Zinc Insulin

In the treatment of a case of diabetes requiring but not yet on insulin treatment, it is well to start with giving protamine zinc insulin once a day before breakfast. Let the initial dose be 5, 10, 15 or more units according to the severity of the case. Increase the units every three days until the case is controlled, or until hypoglycemia occurs. We ourselves have not been able to exceed a single dose of 50 units of protamine zinc insulin. When hypoglycemia occurs, diminish the dose of protamine zinc insulin by 5 units and if more insulin is then required, add units by regular insulin given simultaneously with the protamine zinc insulin. Of course you must not mix the two insulins in the same syringe. Bearing in mind the rather frequent occurrence of a low renal blood sugar threshold it is preferable when possible to go by the blood sugar at 6 a. m., or better still at 3 a. m. rather than by the fasting urine sugar.

We still encounter cases of diabetes which seem to be better controlled by regular insulin than by protamine zinc insulin. They will probably become less frequent as the knowledge concerning protamine zinc insulin increases.—F. Neuhoff, M.D., St. Louis; Jr. of the Mo. State Med. Assn. Vol. 35, No. 4, April, 1938.

PREVENTION OF DEAFNESS

By FRED W. DIXON, M.D., CLEVELAND, OHIO

IT IS estimated that in the United States there are ten million persons with impaired hearing. Of this number three million are children of which sixty thousand are totally deaf. In a survey of three hundred eleven thousand school children in New York, one in every seven or forty thousand had impaired hearing in one or both ears. It is imperative that the public at large be aroused to the necessity of devoting more time, money and research to this handicap which plagues such a large percentage of our population.

The sense of hearing is the principal avenue for receiving instruction, warning or command; it is one of the essential senses in the enjoyment of life, in the appreciation of music, lectures and the contact with those about us. This tragedy coming on in early or late life most surely affects the mind and behavior of the person doomed to a life of semi or complete silence. He becomes sensitive; he withdraws from the contacts of his fellow men. He feels sure his associates are making sport of him and there follows a high degree of mental suffering.

Not only are these people crippled socially, but, economically they are barred from most employment. They are a safety hazard and the employer will give preference to the more fortunate. Most life insurance companies reject the man with the chronic discharging ears.

Despite the great strides of medical science along certain lines, the restoration of hearing has not made great progress. It is the **prevention** of this condition that becomes of primary importance if deafness ever becomes reduced to a minimum. In this disabling handicap it is the general practitioner that can render the greatest service.

Let us keep in mind that the cochlear division, or hearing part of the eighth nerve, is the most sheltered and most susceptible of all nerves. That there are certain families with a predisposition to deafness—where even the slightest insult will produce grave results.

Let us now look at the causes of deafness and see how they can be prevented. Broadly speaking, deafness may be either (1) congenital or (2) acquired. Due to uncertain history and the overlapping of these types, it is difficult to state which class is more common. Most writers feel that the greater number are congenital with the acquired type a close second.

The cause of congenital deafness may be developmental, where, due to a structural defect, some part of the essential elements of the organ of hearing is lacking. There may be an associated feeble mentality or they may be congenital idiots. Here probably heredity plays an important role. Whitham[1] states that "regardless of the character of the deafness the marriage of a deaf person results in the proportion of deaf children of 8.6 per cent. When both parents are deaf mutes, the proportion may be as high as 30 per cent". Fraser[2] places it at 26 per cent.

In discussing consanguinity, Hammerschlag feels that "12 per cent of deaf mutes have parents who were related before marriage".

Included in this class are those cases of intra-uterine faulty resorption. During fetal life the tympanic cavity is filled with loose areolar tissue. This normally is changed about birth into a cavity lined with mucous membrane. Occasionally for some reason this fails and there forms fibrous connective tissue with adhesions to the drum and ossicles. The oval and round windows are filled with dense non-vibrating fibrous tissue. Treatment is of no value—the child is deaf.

Finally there are those cases of pathologic congenital deafness due to drugs, alcohol, syphilis and tuberculosis. Here the nerve pre-natally has suffered degenerative changes.

Of the drug offenders in intra-uterine life, quinine ranks first. This drug given to induce labor or to combat certain fevers in the expectant mother causes the child to be permanently deafened and treatment is of no avail. Taylor[3] who who has reviewed the literature reports 22 fetal deaths due to quinine administered during labor. There was a degenerative atrophy of the ganglion cells and nerve fibres of the basal coil of the cochlea. Other drugs included in this category are the salicylates and lead.

The part played by syphilis in congenital deafness varies according to different investigators from 2 to 20 per cent. Since a negative reaction cannot be taken as a complete proof that syphilis

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does not exist, a correct estimate will be impossible. However, it will be a step forward when a negative syphilitic reaction is a necessary part of the wedding ceremony.

The treatment of the congenital type of deafness we see is preventive. Goldstein[3] lends a ray of hope when he states that "over 30 per cent of reported congenitally deaf cases exhibit a residum of hearing amenable to re-education and stimulation".

CAUSE OF ACQUIRED DEAFNESS IN EARLY CHILDHOOD

The National Research Council reported on their examination of 5,348 deaf children, of which 2,014 had acquired deafness; 19 per cent were due to meningitis, 8½ per cent due to measles, 7 per cent due to scarlet fever, 7 per cent due to influenza and 1 per cent due to mumps, while syphilis was recorded at 1 1/3 per cent. Shurley[4] estimates that "in the acquired deafness in childhood 10.6 per cent of the cases were the result of diseases of the nervous system such as meningitis; 28.3 per cent from infectious diseases and 61.15 per cent from ear diseases and injury of primary origin". Viewing these figures we realize that the hearing loss in approximately 90 per cent of these patients could have been avoided had they been properly treated. Here the parents and occasionally the doctor minimizes the seriousness of a discharging ear. Bear in mind that the chronic discharging ear with its impairment was once an acute ear and could have been made a dry ear with perfect hearing. Any ear which discharges for more than three weeks should be considered a danger to hearing. They will never "outgrow" their hearing loss.

Probably one of the greatest factors in ear infections is enlarged tonsils and adenoids. Every otologist has seen ears become dry after a thorough T & A. Remember that tonsils thoroughly removed do not recur, adenoids may, despite the best surgery. If the ear is discharging always slip your finger up into the naso-pharynx and examine for adenoids. Sinusitis with its postnasal discharge, later pharyngitis and accompanying inflammation of the eustachian tube is likewise a prominent contributing factor, usually responding to appropriate treatment.

Of the general systemic causes, malnutrition ranks first. Selfridge[5] has shown experimentally that where Vitamin B is absent the eighth nerve degenerated.

MANAGEMENT OF INFECTED EARS

Proper diet plus calcium and iron therapy when indicated. In the event of any disease in which the nose and throat are involved, keep the nose and throat clean. Do not blow the nose forcibly. Early myringotomy where the drum bulges if the ear has to be opened. Repeated and thorough cleansing is essential. Most of these infections are streptococcic. Sulphanilimide is the best drug. Do not do repeated myringotomies. One good incision kept open produces less scarring. Do a T & A as soon as the ear is dry or if it is showing only slight discharge. In those cases where the mastoid becomes involved, do a simple mastoid early.

After the damage has been done encourage everyone even with a small loss to take up lip reading, encourage him to listen, to pay attention. The earlier you get the child the greater success you will have. In Cleveland at the Garfield House for the Hard of Hearing they accept them at four years of age. Where the hearing is down 20 per cent he should sit within six feet of the teacher. If he has 30 per cent loss, he should sit by the desk. Where there is over 30 per cent loss the pupil should have a receiver with a two-way switch connected to microphones, one on the teacher's desk and another by the board where the teacher explains the work of the day. Do not place him by a door or open window where it is noisy. The hearing changes from day to day. It is worse when he is tired or nervous and on damp days. Here your work becomes not only medical, but social. Farming, printing, millinery and the dressmaking trades offer a means of livelihood. Be interested in him. Keep him from quacks. Advise him as to his life's work.

CAUSES OF ACQUIRED DEAFNESS IN ADULTS

Many of these are a carry over from childhood. Bear in mind that degeneration of the eighth nerve begins about the same period as presbyopia, cardiovascular and other degenerative conditions. Usually after the fortieth year each decade shows successive loss. Hence, the need to instruct these patients that the loss depends on their attention to diet, health, elimination of foci of infection, proper and prompt care of any colds or pharyngitis. No person, young or old, with a chronic discharging ear or a tendency to deafness should swim or do any diving.

Of the pathologic changes in the ear, itself, coming on in adult life probably otosclerosis will rank first. Here the foot plate of the stapes becomes bony ankylosed to the oval window and the ossicles become fibrosed. In former times every otologist catheterized and inflated the eustachian tube. Bougies were passed to open the tube. These have largely become discarded. No puff of air will blow away these changes. The eustachian catheter is still retained for certain conditions, but its use is limited to the congestions of the eustachian tube. Probably Sourdille of France in his "reconstructed tympanic system" operation has solved the right approach in otosclerosis. It merits investigation.

OLD CHRONIC SUPPURATIVE OTITIS

Here thorough cleansing, not drying in a moment, but careful painstaking attention is essen-

tial. If polyps or granulations are present, remove them. Zinc ionization, iodine powder, boric and alcohol and many others have their followers. Thoroughness is the main thing.

There are many hearing aids on the market. Great improvements have been made. In deciding the type, it depends whether he hears better by air or bone conduction. A thorough check for different tone losses can easily be made. If he has only a small loss, he will not continue using an aid. The cost of these instruments varies from $75 to $145. It costs approximately 50 cents a week for batteries. Have the patient try one before he buys. Hearing aids often open up a new world for these crippled people. But the point I wish to emphasize is that 75 per cent deafness can be prevented, the other 25 per cent can be ameliorated by proper education and advice.

1027 ROSE BUILDING.

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The Effectiveness of Therapeutic Measures After Poisoning With Sublethal and Lethal Dosages of Barbital in the Rabbit

It is well known that resuscitation measures are symptomatically more effective against the short acting hypnotics of the pentobarbital, amytal, or avertin type than against barbital itself. The generally unfavorable prognosis clinically in barbital poisoning suggested the need for this study, which was partially supported by the Council on Pharmacy and Chemistry of the American Medical Association.

"Symptomatic control of the effects of barbital sodium poisoning in rabbits appears to be best accomplished by means of frequent medication with two central convulsions—picrotoxin and metrazol, the judicious administration of a vasopressor agent, ephedrine, and the administration of fluids intravenously preferably in the form of 5 per cent glucose. . . . Medication should be continued at short intervals at the outset of the poisoning as judged by the symptoms present, and at longer intervals as the depth of hypnosis diminishes.

"The administration of picrotoxin results in a submaximal stimulation of respiration, and reactions become maximal only after a latent period. The product in these respects is inferior to metrazol for emergency purposes. However, the duration of action of picrotoxin, which ranges from thirty to one hundred eighty minutes, depending on the depth of hypnosis, is superior to that of metrazol. On the other hand, picrotoxin is not wholly free of undesirable side actions, in that significant secondary depressant effects may develop after excessive dosages.

"The respiratory stimulant effects of metrazol were definitely superior to those of other agents tested. . . . This product is best suited for emergency purposes under conditions of respiratory failure. On numerous occasions spontaneous respiratory movements have been initiated with metrazol intravenously in the presence of continued heart action, one or two minutes after cessation of respiration.

"Ephedrine . . . has a definite place in the antidotal sequence against hypnotic or narcotic poisoning. . . . Larger dosages of ephedrine are prone to produce a heart block of greater or less degree and an embarrassment of respiration due to the development of pulmonary edema.

"The administration of fluids by vein relieves the anuric effects of barbital, accelerates the urinary excretion of barbital slightly, maintains a more normal water balance, and very probably reduces the tendency for the development of acidosis. . . . Optimal results are obtained when fluids are administered in conjunction with picrotoxin, metrazol and ephedrine.

"Coramine, strychnine, and caffeine were of questionable value in the treatment of even lighter grades of barbital sodium poisoning. The order of observed efficiency corresponds to that in which the compounds are listed, as a matter of fact, the data obtained indicate undesirable effects, such as secondary depression from effective dosages, and, in the case of caffeine, these toxic effects were additive with those of the hypnotic".—O. W. Barlow, (Dept. of Pharmacology, Western Reserve Univ. School of Medicine; J. of Lab. & Clin. Med., 23:601; March, 1938).

Simplified Analgesia In Urology

Adequate analgesia for cystoscopies is often obtained by using morphine, grain 1/6 to 1/4, or dilaudid, grain 1/32 to 1/20, with scopolamine, grain 1/150 to 1/100, depending on the weight and irritability of the patient. If such a procedure is used the risk of depression is not as great as when inhalation or spinal anesthesia are used.

2. Dilaudid has proved to be a more satisfactory opiate than morphine for the relief of pain in cystoscopies or other surgical cases, in renal colic, tumors, etc., since there is practically no nausea or other evidence of stimulation accompanying its use, and there is less necessity for post-operative catheterization.—Joseph E. F. Laibe, M.D., Ill. Med. Jour., 73:224, March, 1938.

A CLASSIFICATION OF TUMORS

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With the assistance of the members of the staff of the Tumor Clinic

PART II

VI. Secondary Tumor

I am sure that the supposed infrequency of metastatic tumours of the myocardium is due to inadequate observations (Willis)[58]. Carcinoma of the breast is the most common source of metastases to the myocardium (Willis)[58].

Scott[43] and Garvin in a series of 10,500 autopsies, with 987 cases of malignant disease, report one primary and 100 secondary tumors of the heart and pericardium. Carcinoma of the bronchus is the most common primary tumor in their series.

INTRATHORACIC TUMORS

TUMORS OF LUNG

This classification is largely that of Graham[21].

I. Adenoma

II. Papilloma

III. Fibroma

IV. Lipoma

V. Myoma

VI. Chondroma

VII. Osteoma

VIII. Carcinoma

A. Well differentiated
   1. Squamous cell carcinoma
   2. Adenocarcinoma

B. Partially differentiated (polygonal cells arranged in pavement formation)

C. Undifferentiated
   1. Large round or polyhedral cell tumor
   2. Small cell or "oat cell" tumor (this is essentially of small spindle cell type, the round cells associated being degenerate forms of the spindle cells)

No conclusive evidence has been presented to show that cancer of the lung originates elsewhere than in the bronchi (Karsner)[25] (Ewing[11] does not agree).

Clinically the "superior pulmonary sulcus tumor" is a rather definite entity. Histologic examination shows that it may be any one of the various tumors arising near the thoracic inlet.

IX. Sarcoma (See Section U).

INTRATHORACIC TUMORS

SECTION 2
TUMORS OF LUNG

X. Secondary Tumors

A. Via lymphatics (most often from cancer of stomach and breast)

B. Via blood vessels (most often from cancer of kidney, chorionepithelioma, cancer of thyroid, sarcoma of bone and malignant melanoma) (Willis)[58]

SECTION 1
3. TUMORS OF PLEURA

I. Fibroma
II. Lipoma
III. Angioma
IV. Chondroma
V. Osteoma
} Very rare

VI. "Endothelioma"

The supposed endothelioma of the pleura is in most, if not all, instances an extension from, or metastasis to, the pleura from primary cancer elsewhere. Nevertheless Klemperer and Rabin believe that a small group of tumors exists, derived from mesothelium of the pleura (Karsner) [25].

VII. Sarcoma (see Section U).

VIII. Secondary Tumor (most often from cancer of lung by "transcoelomic metastasis") (Willis)[58].

4. TUMORS OF MEDIASTINUM

I. Lipoma

II. Fibroma

III. Myoma

IV. Chondroma

V. Cyst
   A. Dermoid
   B. Teratoma

VI. Tumor of Nervous Tissue
   A. Neurofibroma
   B. Sympathicoblastoma

VII. **Tumor of Lymph Node**
- A. Hodgkin's Disease
- B. Leucemia (leucosis)
- C. Lymphosarcoma

VIII. **Secondary Tumor** (especially from cancer of lung)

It is now well recognized that the great majority of erstwhile "mediastinal sarcomas" are secondary manifestations of anaplastic bronchial carcinomas (Willis)[58] (Ewing[11] does not agree).

THE DIGESTIVE TRACT

SECTION J

1. TUMORS OF ESOPHAGUS

I. **Fibroma**

II. **Lipoma**

III. **Myoma**
- A. Leiomyoma
- B. Rhabdomyoma

IV. **Papilloma**

V. **Cyst**
- A. Congenital Cyst (may be lined by ciliated columnar epithelium)
- B. Mucous Retention Cyst

VI. **Adenoma**

VII. **Carcinoma**
- A. Squamous Cell Carcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- B. Basal Cell Carcinoma (Ewing doubts occurrence)[11]
- C. Adenocarcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated

VIII. **Sarcoma** (extremely rare) (see Section U).

IX. **Secondary Tumor**

True blood-borne metastases are rare (Willis)[58].

2. TUMORS OF STOMACH

I. **Fibroma**

II. **Lipoma**

III. **Myoma**
- A. Leiomyoma
- B. Rhabdomyoma

IV. **Fibromyoma**

V. **Angioma**
- A. Hemangioma
- B. Lymphangioma

VI. **Neurofibroma**

VII. **Papilloma**

VIII. **Adenoma**

IX. **Carcinoma**
- A. Adenocarcinoma
  1. Well differentiated (this may occasionally be a mucinous type)
  2. Partially differentiated
  3. Undifferentiated (Carcinoma Simplex)
- B. Scirrhous Carcinoma

This type is usually diffuse. The "leather bottle" type may resemble chronic interstitial gastritis in gross appearance.

X. **Sarcoma** (see Section U).

Lymphosarcoma may be apparently primary in the stomach.

XI. **Secondary Tumor**

Malignant melanoma and carcinoma of the breast are the primary tumors most frequently responsible (Willis)[58].

3. TUMORS OF INTESTINE

I. **Fibroma** (rare except in rectum)

II. **Lipoma** (particularly common in colon)

III. **Myoma**
- A. Leiomyoma
- B. Rhabdomyoma

IV. **Fibromyoma**

V. **Angioma**
- A. Hemangioma
- B. Lymphangioma

VI. **Neurofibrima** (single or part of general neurofibromatosis)

VII. **Papilloma**

VIII. **Dermoid Cyst**

IX. **Adenoma** (single or multiple, especially in large intestine, usually polypoid)

X. **Adenomyoma**

XI. **Carcinoid** (especially in ileum, appendix and rectum)

Probable origin is from chromaffin or argentaffin cells.

These tumors are not malignant microscopically but may rarely become clinically malignant (Karsner)[25].

XII. **Carcinoma**
- A. Squamous Cell Carcinoma (in lower rectum and anal canal)
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- B. Adenocarcinoma
  1. Well differentiated (this may occasionally be a mucinous type)
  2. Partially differentiated
  3. Undifferentiated (Carcinoma Simplex, most common form in small intestine)

XIII. **Melanoma** (in lower rectum and anal canal)

XIV. **Sarcoma** (see Section U).

Lymphosarcoma, especially of ileum, is most common. The lesions of leucemia (leucosis) may be similar in appearance.

XV. **Secondary Tumor**

True blood-borne metastases usually arise in melanoma of the skin, or in carcinoma of the lung or breast or in choriocarcinoma (Willis)[58].

Sympathicoblastoma of adrenal medulla may yield intestinal metastases (Ewing)[11].

THE BILIARY TRACT

SECTION K

1. TUMORS OF LIVER

I. **Cavernoma or cavernous hemangioma** (commonest tumor of liver)

II. **Adenoma**

III. **Lipoma**

IV. **Fibroma**

V. **Neurofibroma**

VI. **Adrenal inclusion**

VII. Cyst (Echinococcus cyst is most common)
- A. Congenital multiple cystic disease (may be associated with similar disease of kidney)
- B. Acquired (due to bile duct obstruction)

VIII. **Carcinoma** (may be grossly nodular, massive or diffuse)
- A. Hepatocytoma (usually carcinoma simplex)
- B. Bile Duct Carcinoma (usually adenocarcinoma)

IX. **Hemangio-endothelioma**

X. **Sarcoma** (see Section U).

XI. **Secondary Tumor**

If all classes of malignant tumors are considered collectively, the liver is the most frequent site of blood-borne metastatic growths (Willis)[58].

The most common primary tumors are carcinoma of the stomach, large intestine, pancreas and breast. Pigmented sarcoma of the choroid and malignant melanomas often metastasize to the liver. (Willis)[58].

TUMORS OF GALL BLADDER

I. **Papilloma**

II. **Adenoma**

III. **Fibroma**

IV. **Neurofibroma**

V. **Myoxoma**

VI. **Carcinoma**
- A. Carcinoma Simplex (undifferentiated) is most common
- B. Adenocarcinoma (may be mucinous)
- C. Squamous cell type (probably due to epithelial metaplasia)

VII. **Sarcoma** (see Section U).

VIII. **Secondary Tumor** (rare)

Malignant melanoma is the most common primary source (Willis)[58].

CARCINOMA OF EXTRAHEPATIC BILE DUCTS

I. **Adenocarcinoma** (commonest)
- A. Well differentiated
- B. Partially differentiated
- C. Undifferentiated

In addition this tumor may be described as scirrhous or medullary.

II. **Squamous Cell Carcinoma** (probably due to epithelial metaplasia)

In carcinoma of the Ampulla of Vater the type is almost always columnar-cell adenocarcinoma.

TUMORS OF PANCREAS

SECTION L

I. **Lipoma**
II. **Myxoma**
III. **Chondroma**
IV. **Fibroma**

} Relatively frequent

V. **Adenoma**
- A. From ducts or acini (may be solid or cystic)

B. From islets

Rare cases of adenoma originate from the islets of Langerhans (Whipple)[57].

VI. Cyst

A. Proliferation Cyst (same as cystic form of adenoma, V above)

B. Congenital Cystic Disease

C. Retention Cyst

D. Cystoid (probably the result of hemorrhage, A. B. & C. above are lined by epithelial cells)

VII. Carcinoma

A. Carcinoma Simplex (metaplasia, with formation of squamous epithelial cells, is rare)

B. Adenocarcinoma (mucinous type is infrequent)

1. Well differentiated
2. Partially differentiated
3. Undifferentiated

VIII. Sarcoma (see Section U).

IX. Secondary Tumor (especially from cancer of lung, melanoma, and cancer of breast and thyroid) (Willis)[58].

TUMORS OF SPLEEN

SECTION L

I. Hemangioma (most common tumerous lesion. It is a hamartoma rather than neoplastic)

II. Fibroma

III. Chondroma

IV. Osteoma

V. Cyst

A. Blood filled (probably traumatic)
B. Lymphatic
C. Dermoid
D. Epithelial lined

VI. Sarcoma (rare) (see Section U).

VII. Lymphoblastoma (the Leucemias (leucoses), Hodgkin's Disease, Lymphosarcoma, etc., see Section V.)

VIII. Secondary Tumor (especially from thymoma, cancer of breast, melanoma and choriocarcinoma) (Willis)[58].

RETROPERITONEAL AND MESENTERIC TUMORS

SECTION M

RETROPERITONEAL TUMORS

I. Lipoma

II. Fibroma

III. Lymphangioma Cysticum (usually in sacral region)

IV. Dermoid Cyst (of pelvic connective tissue)

V. Adrenal Rest

VI. Sarcoma (see Section U).

A. Undifferentiated cell type

B. Partially differentiated cell type

1. Liposarcoma
2. Lymphosarcoma

VII. Secondary Tumor (especially from testis)

MESENTERIC TUMORS

I. Solid Tumors

A. Fibroma

B. Lipoma

C. Sarcoma (see Section U).

1. Fibrosarcoma (Rankin[41] & Major, Hart[22]).
2. Lymphosarcoma (Bigelow[3] & Forman)

D. Secondary Tumor

II. Cysts

The following classification is that of Ewing[10].

A. Chylous Cyst

Contents are clear or chylous.
Wall is fibrous tissue.

B. Enteric Cyst

Contents are mucinous, colorless, yellowish or brownish fluid.
Wall may contain smooth muscle and be lined by epithelium.

C. Intraperitoneal cyst of nephrogenic origin

Contents are brownish serous fluid containing pseudomucin.
Wall is fibrous tissue and may be lined by high cylindrical or cuboidal epithelium.

D. Dermoid Cyst

Contents are hair and sebaceous material.
Wall usually lined by squamous epithelium.

TUMORS OF UMBILICUS AND ABDOMINAL WALL

SECTION N

TUMORS OF UMBILICUS (rare)

This classification is slightly modified from that of Cullen.[8]

I. Angioma

II. Myxoma

III. Fibroma

IV. Lipoma

V. Dermoid Cyst

VI. Papilloma

VII. Carcinoma
- A. Squamous Cell Carcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- B. Adenocarcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated

VIII. Sarcoma (see Section U).

IX. Secondary Tumor (usually from cancer of stomach, gall-bladder, intestine or ovary) (Willis)[58].

TUMORS OF ABDOMINAL WALL

I. Fibroma (desmoid)

II. Fibrosarcoma

The structure varies from a hard acellular fibroma to a rather cellular fibrosarcoma, the latter type exhibiting somewhat active growth (Ewing)[10].

The possible relation to neurofibroma is to be considered (Ewing)[10].

TUMORS OF ADRENAL

SECTION O

This classification is based on that of Geschickter.

I. Tumor of Cortex (sometimes associated with genito-suprarenal syndrome of Gallais)
- A. Adenoma (nearly always asymptomatic)
- B. Carcinoma (sometimes called hypernephroma, mesothelioma or suprarenal epithelioma) (More often associated with functional disturbance than adenoma)

"Many of the cases described in the literature as carcinoma of the cortex are neoplasms of the androgenic tissue which give rise to the adreno-genital syndrome", sometimes clinically indistinguishable from Cushing's pituitary syndrome. (Grollman)[22].

II. Tumor of Medulla
- A. Sympathicoblastoma (form of neuroblastoma)

(Usually in infants and rapidly fatal)
  1. Pepper Type (metastasis to or direct invasion of liver)
  2. Hutchison Type (metastases to regional nodes and skull)
- B. Phaeochromocytoma (paraganglioma, chromaffinoma)

(Usually vasomotor instability and sometimes glycosuria)
- C. Ganglioneuroma (usually asymptomatic)

III. Secondary Tumor

Cancer of the breast and lung are the most common primary tumors yielding adrenal metastases. The adrenal may also be involved by secondary melanomas or by lymphoid leucemia and allied diseases. "Chorioncarcinoma, despite its frequently wide dissemination by the blood stream, rarely yields adrenal metastases" (Willis)[58].

THE FEMALE GENITAL TRACT

SECTION P

1. TUMORS OF OVARY

I. Fibroma

II. Fibromyoma

III. Cyst
- A. Follicular Cyst (lined by remnants of the stratum granulosum)
- B. Corpus Luteum Cyst (lined by convoluted masses of lutein cells)
- C. Theca-lutein Cyst (lined by connective tissue cells of theca-interna, with lutein pigment)

Theca-lutein cysts are the especial accompaniment of hydatidiform mole and chorionepithelioma (Karsner)[25].
- D. Dermoid Cyst (see under ovarian teratoma)

IV. Cystadenoma (often papillary)
- A. Pseudomucinous Cystadenoma (lined by a single layer of nonciliated columnar cells, which may contain pseudomucin)
- B. Serous Cystadenoma (lined by low columnar ciliated epithelium)

V. Endometrioma (lined by cylindrical epithelium and tunica propria like that of the endometrium)

VI. Carcinoma
- A. Cystic Form (usually papillary)
  1. Pseudomucinous Cystadenocarcinoma
     a. Well differentiated
     b. Partially differentiated
     c. Undifferentiated
  2. Serous Cystadenocarcinoma
     a. Well differentiated
     b. Partially differentiated
     c. Undifferentiated
- B. Solid Form
  1. Adenocarcinoma
     a. Well differentiated
     b. Partially differentiated
     c. Undifferentiated (Carcinoma Simplex)
  2. Squamous Cell Carcinoma (rare, probably a manifestation of teratoma)
     a. Well differentiated
     b. Partially differentiated
     c. Undifferentiated

VII. Sarcoma (see Section U).

Immature cell type is more common.

(*Continued in July Issue*)

REPORT OF THE USE OF BIO-PHOTOMETER AND VITAMIN A THERAPY IN INDUSTRY

By RALPH C. WISE, M.D., and O. H. SCHETTLER, M.D., MANSFIELD, OHIO

DURING the past few years much has been written about the use of vitamin A in various ocular conditions. In reviewing the literature available no reference was found where any comprehensive studies had been made relative to its use in industry.

The problem that led to this study was due to the relatively high per cent of rejections of off color parts in assembly of ranges at Westinghouse Electric & Manufacturing Company. During the past 15 years this company has used every known device to build up the color matching facilities with but a moderate degree of success. Photo electric color matching, mercury vapor shadowless lighting tunnels, etc., were productive of improvement but did not prove entirely satisfactory. The men working in this department were selected with the utmost care and were checked for visual defects and color blindness.

In history taking of the workers it was apparent that most of them were suffering from fatigue. Frequent changes of shifts and shorter hours were tried and the results unchanged. In view of our more recent knowledge of the physiology of the eye fatigue is due to a decrease in the regeneration of the visual purple and therefore a deterioration of the light threshold. With the high intensity of light used it was thought that this regeneration was impeded and if this could be changed and maintained at a high level that some solution of our problem would be accomplished.

The Bio-Photometer which measures the rate and regeneration of the visual purple was employed. The following procedure was followed. Each man in this department was tested and a graphic charting made of results. At first test if any deficiency was found vitamin A therapy was given in the form of Carotene in oil. The amount given was three capsules of No. 600 daily. Frequent reexaminations were made to determine if saturation point had been reached and findings charted.

The results thus far of this procedure have been so gratifying that we feel this preliminary report is justified. The rejections as shown by the charts attached show an improvement of 75 per cent over a period of months. The workers taking this treatment have had much more eye comfort than they had previously experienced and in many instances have improved in general health.

The following history is typical of 20 or more.

Case: John Smith: Worker states that he has had eye discomfort and headaches especially after prolonged color matching. Was unable to do any reading after a day's work and that he had constant smarting and burning of eyes. All symptoms have entirely disappeared since starting treatment and his weight has increased eight pounds.

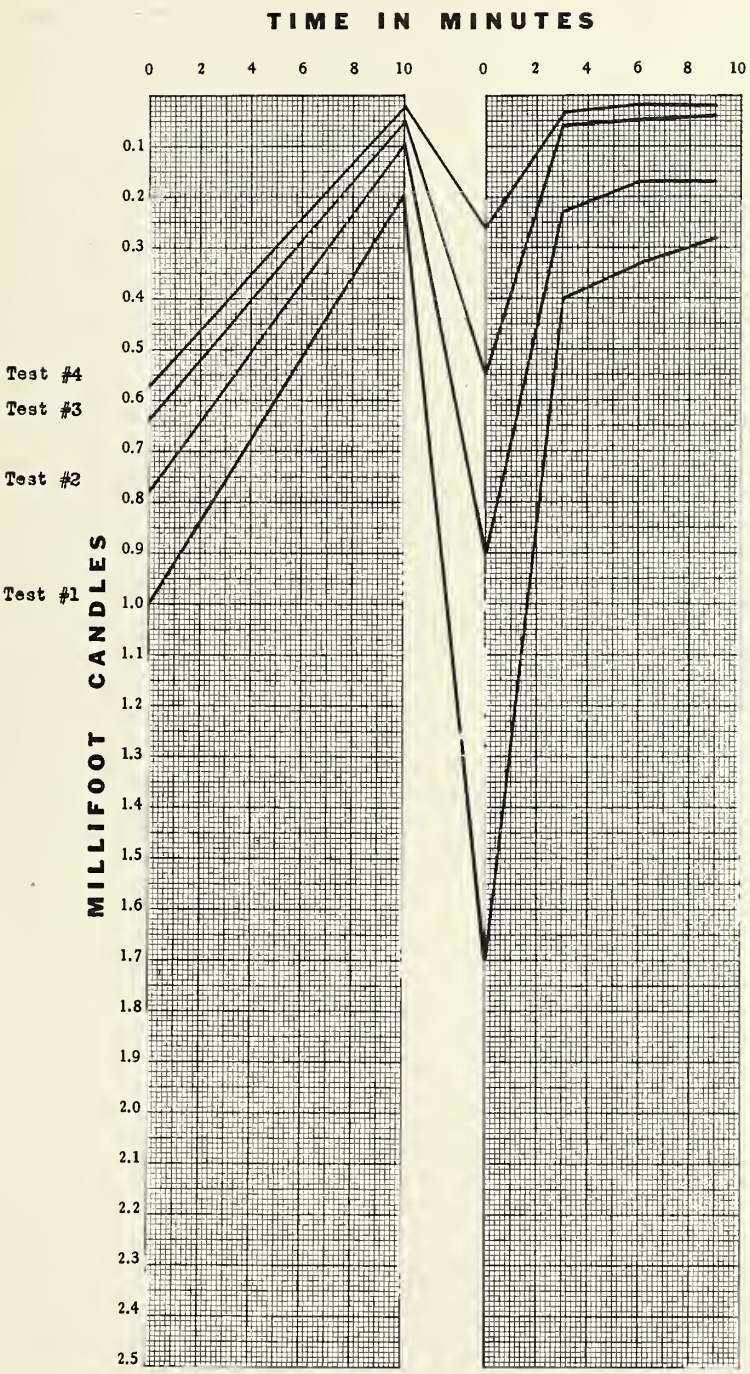
The Authors

● Dr. Wise is a graduate of Jefferson Medical College, Philadelphia, 1901; member American Academy of Ophthalmology and Otolaryngology, American Medical Association; member of staff of Mansfield General Hospital.

● Dr. Schettler is a graduate of Western Reserve University School of Medicine, 1921; member American Medical Association; member of staff of Mansfield General Hospital.

This work and charting has been carefully and accurately done by Messrs. R. F. Bisbee, chief inspector, and B. H. Goodenough, industrial relations department.

Submitted April 25, 1938.



BIO-PHOTOMETER TEST CHART

Date _____

Name John Smith

Age 29 Sex Male

Tests 1, 2, 3 and 4 were taken one week apart for four weeks. (30,000 units of Vitamin A per day were given during this period).

Note: The following figures (not shown on the chart) are Bio-photometer readings taken after the first four weeks. These readings were taken two weeks apart -- note the uniformity:

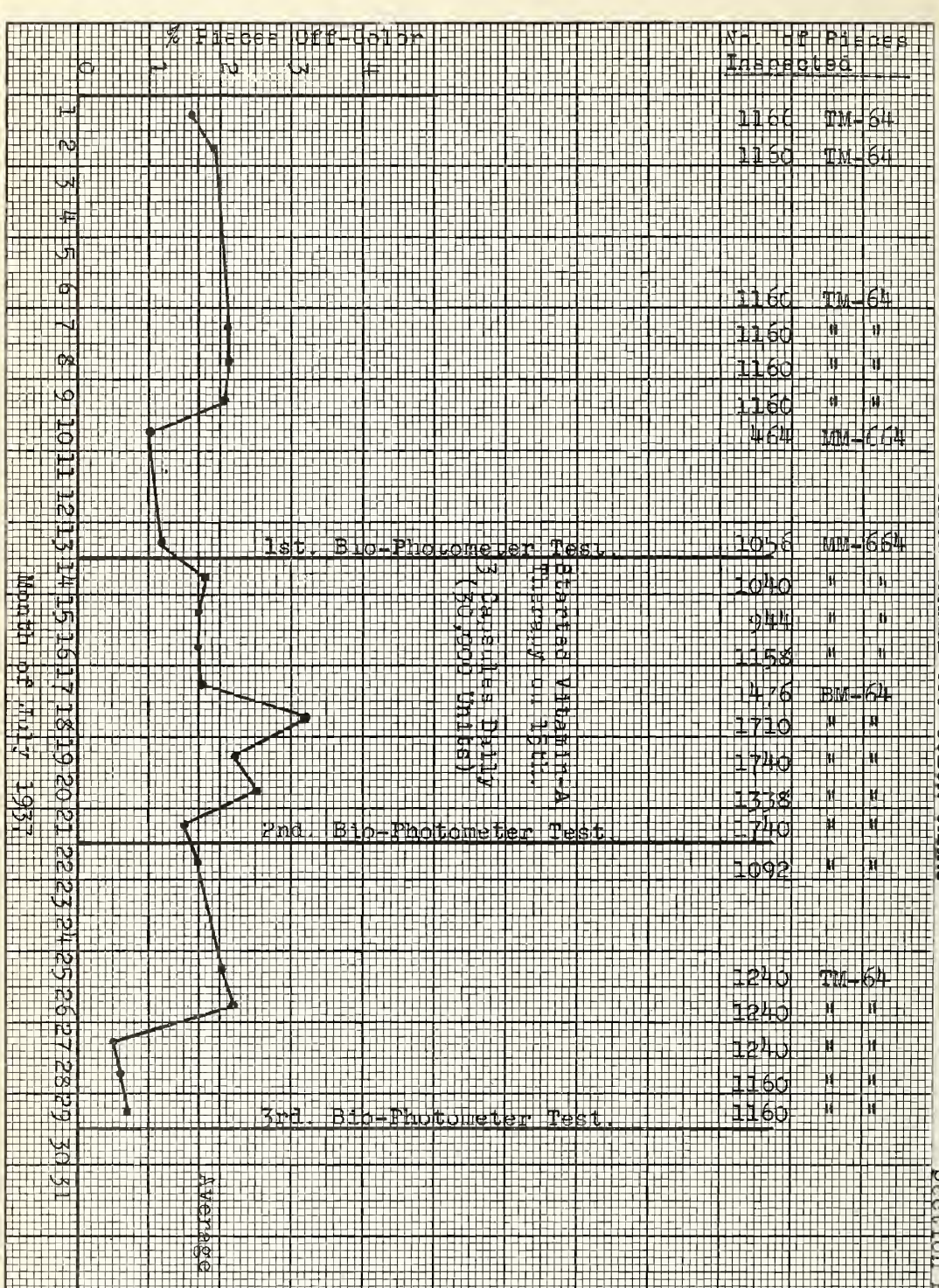
Readings in Millifoot Candles

.350
.290
.260
.290
.315
.260

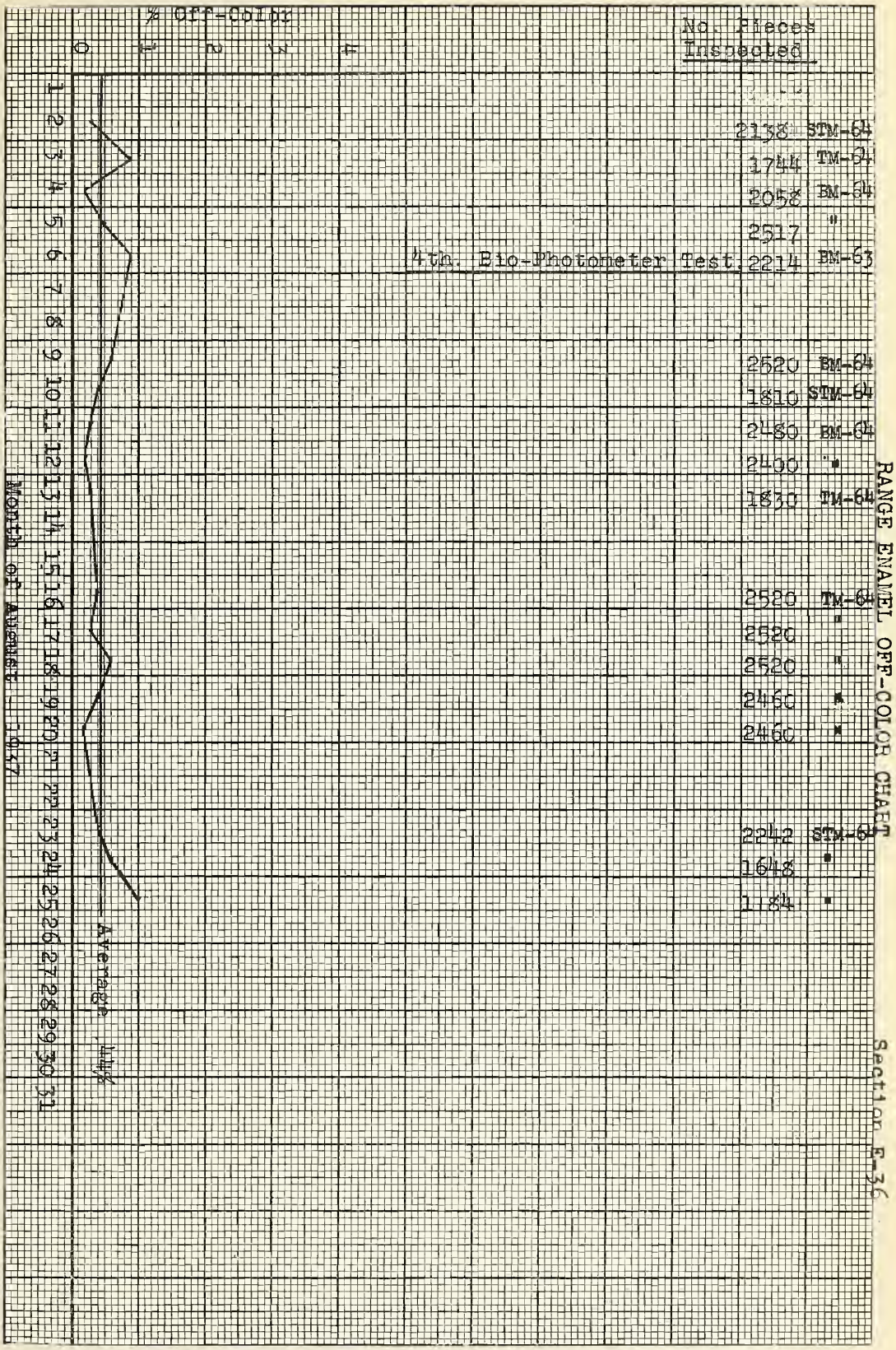
The above readings are those taken after the 3 minute bleach.

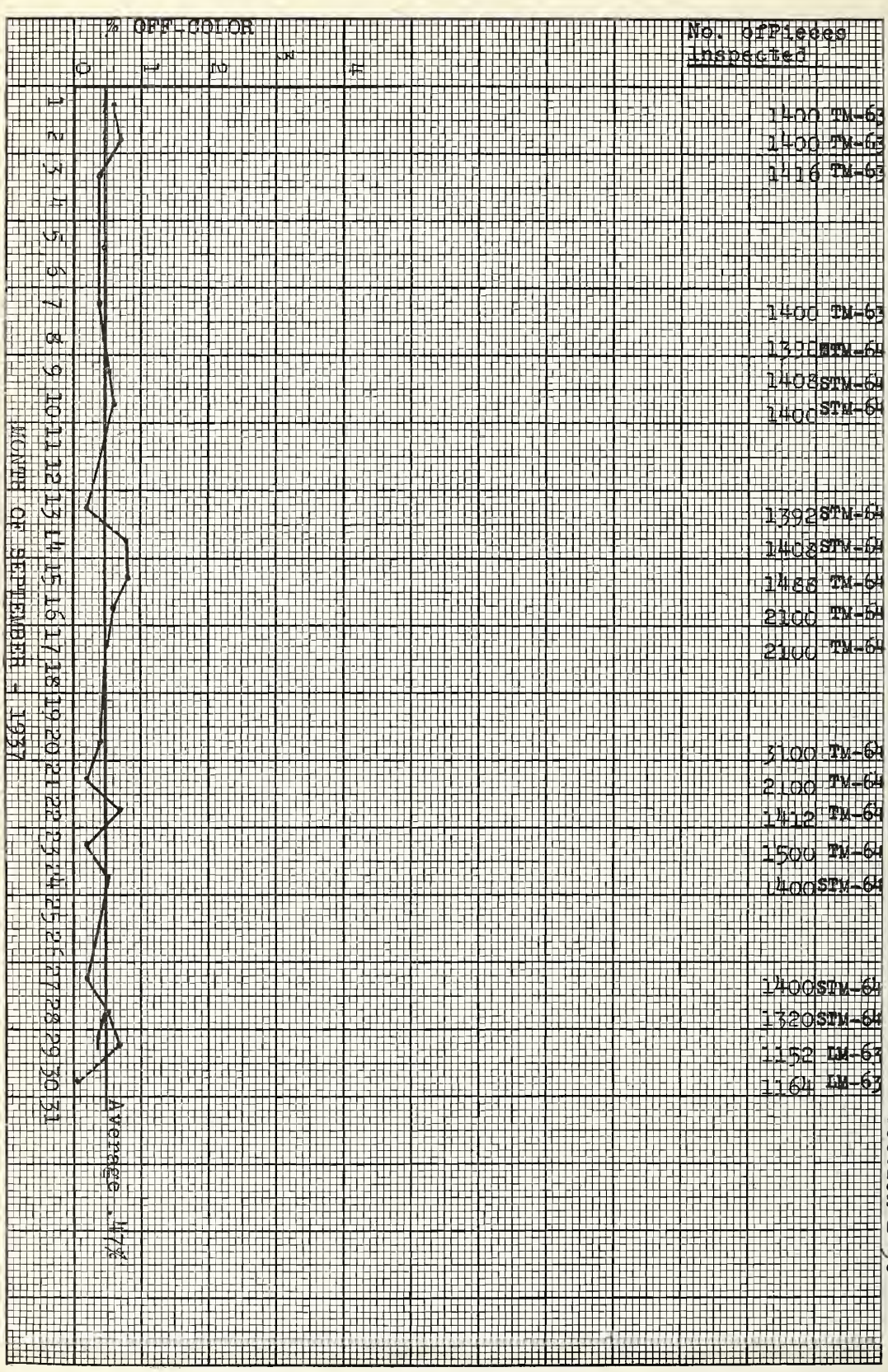
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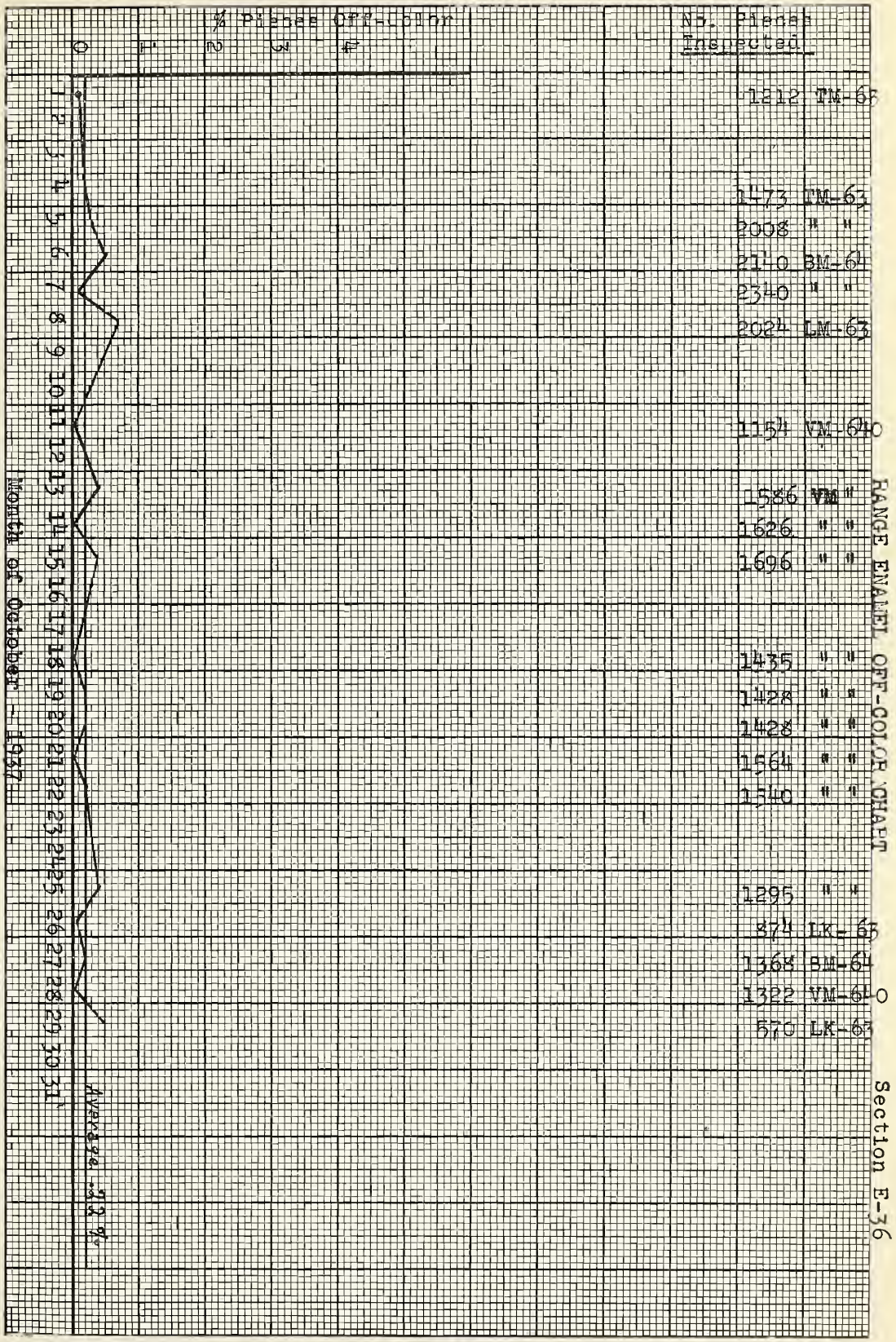
© FROSER-FAYBOR CO.

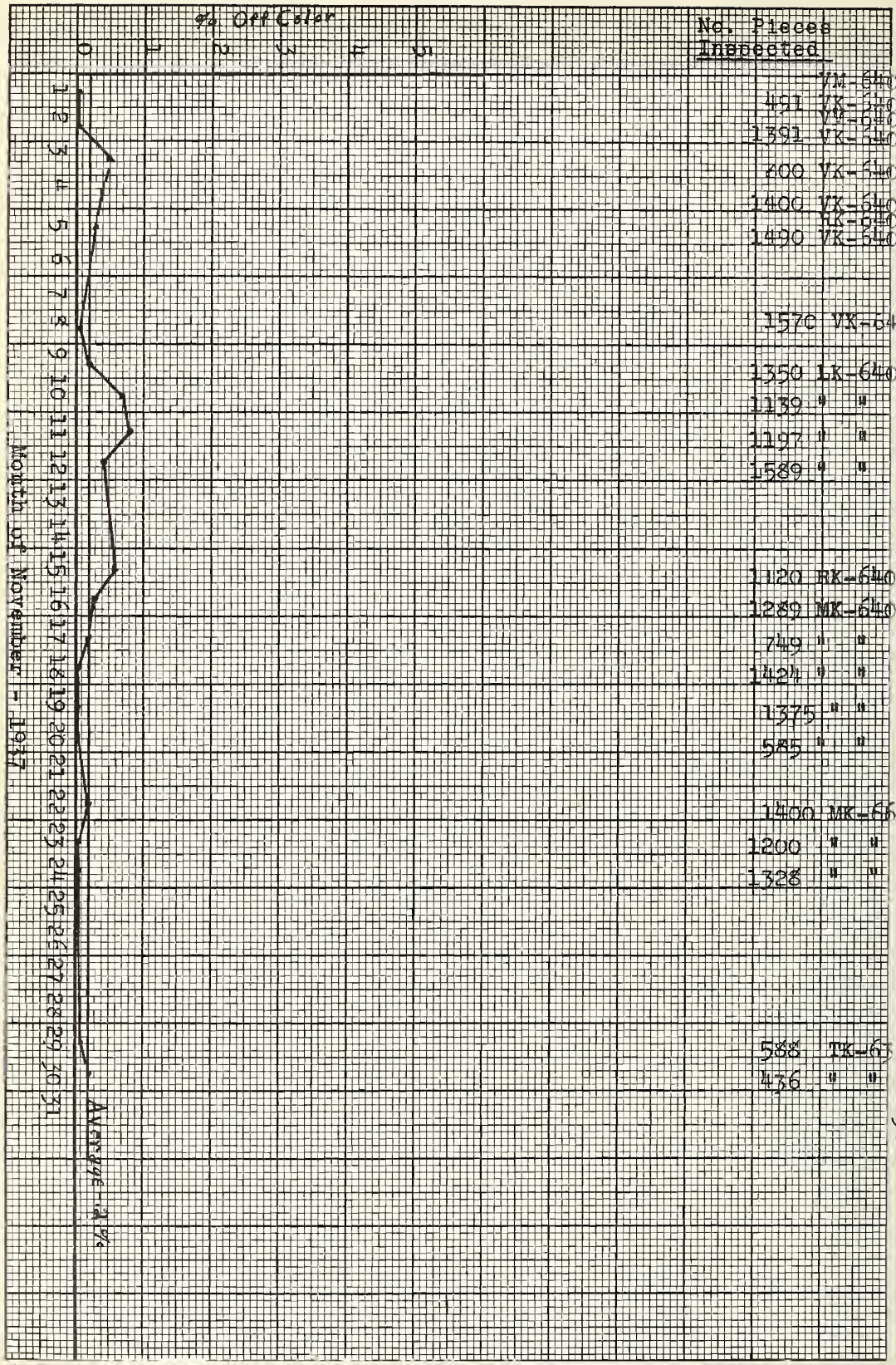


Note: Average No. Of Off-Color Pieces For Previous 6 Mo. = 1.7%


% Off-Color
0
1
2
3
4
No. Pieces Inspected
4th. Bio-Photometer Test.
2138 STM-64
1744 TM-64
2058 BM-64
2517 "
2214 BM-63
2520 BM-64
1810 STM-64
2480 BM-64
2400 "
1830 TM-64
2520 TM-64
2520 "
2520 "
2460 "
2460 "
2242 STM-64
1648 "
1184 "
Month of August 1937
Average Line
RANGE ENAMEL OFF-COLOR CHART
Section E-36


RANGE ENAMEL OFF-COLOR CHART
Section E-36
% OFF-COLOR
0
1
2
3
4
No. of Pieces Inspected
1400 TM-63
1400 TM-63
1416 TM-63
1400 TM-63
1392 STM-63
1408 STM-63
1400 STM-63
1392 STM-63
1408 STM-63
1488 TM-63
2100 TM-63
2100 TM-63
2100 TM-63
2100 TM-63
1412 TM-63
1500 TM-63
1400 STM-63
1400 STM-63
1320 STM-63
1152 LM-63
1164 LM-63
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
MONTH OF SEPTEMBER 1937
Average .47%


% Pieces Off-Color
0 1 2 3 4
No. Pieces Inspected
1212 TM-66
1173 TM-63
2008 " "
2110 BM-64
2340 " "
2024 LM-63
1154 VM-64
1586 VM "
1626 " "
1696 " "
1435 " "
1428 " "
1428 " "
1564 " "
1340 " "
1295 " "
874 LK-65
1368 BM-64
1322 VM-64
670 LK-65
Month of October - 1937
Average .33 %
RANGE ENAMEL OFF-COLOR CHART
Section E-36


% Off Color
0
1
2
3
4
5
No. Pieces Inspected
VM-640
491 VK-640
VM-640
1391 VK-640
800 VK-640
1400 VK-640
RK-640
1490 VK-640
1570 VK-640
1350 LK-640
1139 " "
1197 " "
1589 " "
1120 RK-640
1289 MK-640
749 " "
1424 " "
1375 " "
585 " "
1400 MK-640
1200 " "
1328 " "
588 TK-640
436 " "
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Month of November - 1917
Average - 2%
RANGE OFF-COLOR CHART
Section E-36

HYPERTROPHY OF MAMMARY GLANDS

By WAYNE BREHM, M.D., F.A.C.S., Columbus, Ohio

Case History: Mrs. H., age 26, March 24, 1930.

Present Illness:—About the middle of last November breasts became somewhat larger than normal, and gradually increased in size and firmness, with an occasional nodule in left axilla, which later disappeared. No pain until the last six weeks, when they became quite painful, and very uncomfortable, due to the increase in weight. No discharge from the nipples, occasionally noticed some redness in areas over the breasts, but this was not constant. Had a special brassiere made to carry the breasts. Has consulted several physicians in the northern part of the state, and an osteopathic physician in this city.

Family History:—Negative, except paternal grandfather had carcinoma, she thinks of stomach.

Past History:—Usual childhood diseases, tonsil and adenoid operation one year ago. (Her mother states she has had "goitre trouble" since she was two years of age, and "ovarian trouble" since puberty).

Menstrual History:—Began at 12, regular, 28 days, 4 to 5 day flow, with cramps, and pain in both breasts one day preceding flow. Last regular menstruation Nov. 5, 1929, one day flow Dec. 10th, and a half day flow middle of January, none February, or March. Married 15 months, weight 112 at that time. No previous pregnancies. One year ago was given a glandular preparation (Thyro-Varium) for the relief of dysmenorrhea, and in an endeavor to enlarge her breasts, which except for a well defined nipple, were almost absent. This treatment continued for six weeks, ineffective, and stopped.

Examination:—White, female, weighing 132. **Head and Neck:**—Negative, except enlarged thyroid four times normal size. **Heart and Lungs:**—Negative.

Breasts:—Both breasts enormously enlarged (Figure 1) symmetrical, extending about three inches below the umbilicus. The right, from the superior to the inferior margin measures 28 cm., and width 23 cm., circumference 65 cm. The left, from the superior to the inferior margin 26 cm., transversely 21½ cm., circumference 63 cm., they are firm, show slight pitting on the surface, skin is stretched and glossy, pigmented, reddish brown in color, do not feel hot or inflammatory. The breast tissue is rather firm, no palpable masses felt, freely movable over their base, nipples are flat, no secretion, several small palpable glands both axilla. Glandular tissue diffusely hyperplastic. Apparently no evidence of sarcoma or carcinoma.

Abdomen:—Uterus palpable about midway between symphysis and umbilicus. **Vaginal Examination:**—Small vaginal canal, cervix soft, all signs of normal uterine pregnancy are positive. **Tubo-ovarian regions:**—Negative. **Extremities:**—Normal. **Temperature** 98, **pulse** 100, **respirations** 20. **Urine:**—Sp. Gr. 1015, alkaline, negative throughout. **Aschheim-Zondek** test for pregnancy was strongly positive. **Blood:**—Hemoglobin 85, erythrocytes 4,800,000, leukocytes 12,700, neutrophiles 76, eosinophiles 2, small lymphocytes 20, large lymphocytes 2.

Wassermann—Kahn negative. Blood negative for Filarium (Patient has never been in Southern States). **Basal Metabolic Rate**—plus 64, the following day plus 79. (Laboratory reports these are very inaccurate because of poor cooperation, nervousness, and excitability of the patient, with panting respirations at times).

Diagnosis:—Four months normal uterine pregnancy, bilateral hypertrophy and hyperplasia of breasts, probably endocrine etiology.

PROGRESS NOTES

March 24, 1930—First seen.

March 25, 26, 27—Hospitalization, observations, consultations, including all laboratory work.

March 28, 1930—Given Thyroid Extract; Thymus Extract; Mamos; Iodides; all P. O.

April 2, 1930—X-ray sella turcica, negative for pathology.

April 5, 1930—Blood examination—Coagulation time 3½; Hb. 74 Dare; erythrocytes 4,450,000; leukocytes 10,100; neutrophiles 54; eosinophiles 2; small lymphocytes 40; large mono and trans. 4; sugar 80 mg. Urine Examination—Sp. gr. 1018, negative except sugar 955 mg. (lactose).

April 9, 1930—Breasts appeared red and hot with a distinct difference between their feel in temperature and the rest of her body. She states that during past week had almost daily fluishings of breasts, became red, more tender and felt as though their temperature was higher than rest of body. (Has not been using any applications for about six weeks, but has tried hot and cold applications constantly and alternately).

Therapeutic abortion (hysterotrachelotomy) removed about 4 or 4½ month female fetus and placenta apparently normal, except some yellowish pigmentation of amnion (sent to labora-

The Author

● Dr. Brehm is a graduate of Ohio State University College of Medicine, 1914; fellow American College of Surgeons; chief of staff of Columbus Radium Hospital, consulting obstetrician, St. Ann's Maternity Hospital, Columbus.

Submitted March 29, 1938.

tory, they reported 'Infarcts of placentae with areas of degeneration and leucocytic infiltration').

April 10, 1930—No pain in breasts since operation, slept all night, first time for about eight weeks.

April 11, 1930—Marked increase in size of breasts, notably upper outer angles, engorged very tender, appear like normal breasts beginning lactation.

April 12, 1930—Breasts more engorged and inflamed, ice caps continuously. Codein qs.

April 15, 1930—Copious flow of milk.

April 19, 1930—Milk flow slight, breasts reduced one-fourth in size, patient comfortable.



Fig. 1—Before Operation, March 25, 1930

April 20, 1930—Patient discharged from hospital.

April 30, 1930—Breasts enlarging again, very painful, scant milk flow.

May 9, 1930—Right breast incised below and external to nipple about one ounce of pus.

May 19, 1930—Incision healed, breast still enlarging, extremely painful.

May 20, 1930—Re-entered hospital.

May 21, 1930—Radical bilateral amputation of breasts by the late Dr. J. F. Baldwin (frozen section reported suspicious of carcinoma, but final sections were reported hypertrophied tissue only). Right breast weighed 2870 grams, the left 2280 grams.

Microscopic sections:—The alvaelae greatly increased in number, and where not crowded by connective tissue the epithelial cells are large and filled with fatty secretory material, ducts are distended.

Laboratory diagnosis:—Hypertrophied breasts. Urine—Sugar 2000 mg. (lactose).

May 22, 1930—Urine—Sugar 1000 mg. (lactose).

June 1, 1930—Discharged from hospital, incisions healed.

June 7, 1930—Uterus normal size.

Oct. 1, 1930—Feels fine, menstruation irregular. Some breast tissue present on left side which had not been completely removed.

Dec. 10, 1930—Diagnosis early pregnancy.

Feb. 16, 1931—Aschheim Zondek—positive.

Mch. 24, 1931—Re-entered hospital in labor, spontaneous expulsion five month male fetus lived fifteen minutes, placenta praevia.

Mch. 28, 1931—Discharged from hospital per ambulance.

Oct. 10, 1931—Diagnosis of pregnancy dating from June.

Nov. 30, 1931—Basal Metabolism (at Cleveland Clinic)—25.

Jan. 7, 1932—Breast areas appear discolored and some breast tissue left side enlarged to about size of an egg. Some burning sensations present in this tissue. Patient moved to Canton, Ohio.

Feb. 7, 1932—Delivered of male 7 month premature child weighing 3 pounds 12 ounces, by Dr. L. E. Leavenworth (boy now nearly six years old).

Mch. 8, 1932—Breast tissue left after amputation about the size of a walnut on lower left chest.

Jan. 6, 1935—Menstruation since birth of living child 28 to 33 days, five to seven days flow. Sexual life normal, occasional hot flash before flow starts.

General health same as before marriage.



Fig. 2—After Last Delivery, June 26, 1937

Dec. 10, 1936—Last menstruation Oct. 4, 1936. Diagnosis of early pregnancy (is returning to her home for antepartum care and delivery).

June 23, 1937—Delivered female child weighing 7 lbs. 2¼ oz. by Dr. L. E. Leavenworth in Canton, followed by considerable enlargement left breast tissue (see photograph).

Nov. 9, 1937—General health fair, quite nervous, second degree procidentia and retroversion of uterus. Advised pelvic surgery.

CORRESPONDENCE

Shock Therapy in Schizophrenia

April 11, 1938.

To the Editor—

After having given 4,000 insulin shock treatments to 75 patients with no deaths and no serious complications, and after treating over 100 patients with metrazol, I feel forced to write what may be considered an answer to the article "Shock Therapy of Schizophrenia", by Dr. Beatrice Postle of Columbus. (*The Journal*, April, 1938, page 410).

The attitude of Dr. Postle to the new treatments of schizophrenia as expressed in her paper is very difficult to understand. If the contents of her essay are analyzed they are found to be based upon: 1) Reference to literature which antedates the introduction and general use of newer treatments, and much of which is ancient and long discarded; 2) A brief and very incomplete report of her experience with 30 cases in which she does not even state whether insulin or metrazol or a combination of the two methods was used; 3) An attitude of complete defeat and surrender in the face of a problem which, though difficult, is urgently in need of intelligent and open-minded, if not optimistic, effort toward solution.

The problem that presents itself in American psychiatric hospitals concerns the care and management of thousands of new patients (over 800 in Ohio alone) each year. Most of these are doomed to remain incarcerated for the duration of their lives as the result of their mental illness. These figures are for the schizophrenic patients only. The prognosis without treatment is much worse than published figures would indicate, because many patients discharged as improved or even recovered without treatment are unable to take a normal part in the life of the community. Such discharged patients are usually removed from hospitals by their families because mild social adjustment is impossible after a period of hospitalization, and because there is a certain amount of disgrace and shame attached unjustly to the commitment of a member of a family to a state institution.

Dr. Postle's conclusions cannot go unchallenged. That the newer treatments of schizophrenia recall methods which were discarded after centuries of use is on the face of it untrue. In the first place, no single method or combination of methods of treatment has ever been in use for the treatment of schizophrenia, which has not been recognized even as a roughly delimited syndrome for more than 50 years; secondly, there is nothing in the newer treatment in any way reminiscent of the torture of the insane in medieval times. That the newer methods of treatment are empirical detracts in no way from their usefulness. The use of quinine for malaria was similarly empirically derived. The contention that the treatments are illogical can hardly be supported in the face of numerous favorable reports from honest, industrious, and intelligent workers. That the treatment has resulted in the death of individuals who would have had a fair chance of recovery from their mental illness is a statement hardly to be considered seriously. The 1½ to 2 per cent mortality which Dr. Postle imputes to the method is no more than the surgical risk in appendectomy. It would be as rational to say that those patients dying of appendectomies would have had a reasonable chance of survival (50 or more per cent) if left unoperated as it is to bemoan the fact that a certain amount of risk is attached to the new treatment of schizophrenia. In careful hands the mortality is not as great as Dr. Postle has stated, and besides if the mortality were ten times as great the risk would be worth taking in an attempt to avoid the living death which such patients are destined to endure in great proportion without treatment.

That we should have to disregard most of our conceptions about this disease if we accept the new treatments as specifics for schizophrenia is in no way derogatory as Dr. Postle means to imply. It is only within recent years that the work of Minot, Murphy, Castle and others has resulted in the complete change of our conception of pernicious anemia and anemias in general. It is also within the memory of many physicians working today that conceptions of other illnesses have been changed with the discarding of many useless and outdated ideas as in the cases of tuberculosis, typhoid, malaria, paresis, etc. The language of Dr. Postle's last paragraph ("That what is termed schizophrenia represents a certain type of personality reaction, based in part perhaps on innate constitutional inadequacies, in part on a corresponding psychological inadequacy, and precipitated perhaps by certain situations of environmental stress and strain,") is reminiscent of the erudite discussions of diseases of unknown etiology in our grandfathers' textbooks. Modern psychiatry admits many nosologic deficiencies, but the experience of numerous competent observers before and since the introduction of the newer treatment must be recognized as useful and valid.—Douglas Goldman, M.D., Clinical Director, Longview Hospital, Cincinnati, Ohio.

April 18, 1938.

The above communication was referred to Dr. Postle, who submits the following reply:

Apparently Doctor Goldman, in having no fatalities, has been more fortunate than some physicians administering the insulin shock therapy for schizophrenia. The 1½ to 2 per cent mortality which I quoted in my article is the figure given by Doctor Cobb who analyzed the existing literature. Does the first paragraph of Doctor Goldman's letter imply that he may have had deaths or complications with metrazol cases?

(1) My reference to ancient and long discarded literature was for the purpose of calling attention to the historical development of shock treatment in the psychoses. I fail to see why the newer shock treatments do not recall the older methods which were used. Many of the present day writers emphasize "the death threat" as a possible mechanism in the amelioration of symptoms seen in some cases of schizophrenia as a result of the hypoglycemic and the convulsive therapies. Aside from the psychological aspect, comparing the old shock therapies with the new, there might be a similarity in the physiological or pathological changes induced. For example, certain authors have found that there is a marked lack of oxygen during hypoglycemia and have concluded that asphyxia of the brain may play an important part in the phenomena of hypoglycemic coma and convulsions. An analogy might be drawn. The old treatment of holding a patient's head in water until he was near death suggests a similar mechanism (deprivation of oxygen and asphyxia of the brain).

(2) My report of 30 cases treated by convulsive therapy may be accused of being incomplete but it seems to me that the essential facts

were given. Space accorded for articles is ordinarily not limitless. So far as I know, the term convulsive therapy does not refer to the insulin therapy and I do not know why there should be any confusion about this. I am aware, of course, that the two are sometimes combined.

(3) A skepticism regarding the shock therapies as cure-alls for schizophrenia need not imply an attitude of complete defeat. I am certainly not alone, however, in believing that there are certain so-called constitutional types of schizophrenia. The abnormal behavior patterns of these individuals can be traced back to infancy and early childhood becoming more accentuated during adolescence and early adult life.

There is no argument concerning the enormity of the schizophrenia problem, and if the shock therapies could cure a majority of schizophrenic individuals, the risk would be justified. However, the claims of the shock therapy enthusiasts are far from being proved. Many of the large clinics and hospitals have not yet released opinions and figures.

Recently, physicians from two large hospitals doing outstanding work in psychiatry (Bloomingdale Hospital and the Worcester State Hospital) speaking at meetings have commented unfavorably on their results with the shock therapies. I presume that the workers there are as honest, industrious and intelligent as those quoted by Doctor Goldman. Equally honest, etc., workers have in the past claimed to cure large percentages of psychotic individuals by such methods as the removal of foci of infection, by the administration of manganese salts, and by various other methods which have not stood the test of time.

The significance of the personal attention factor in schizophrenic patients receiving special forms of therapy has long been recognized. It is undoubtedly to be considered in evaluating the results of the shock therapies. It is also probably one of the reasons why private institutions show higher recovery rates than those of the state institutions.

Statistics are notoriously misleading and it will, no doubt, prove difficult to evaluate these in connection with the shock therapies. For example, I can prove by statistics that there is exactly the same percentage of female schizophrenic patients (not treated by the shock therapies) admitted to the Columbus State Hospital during 1936, now home, recovered, or improved, as compared to the total number of female patients treated with insulin who are now home. If to the former group were added cases whose mental symptomatology strongly suggested schizophrenia (some such cases were treated by insulin) the figures would favor more the untreated group. Naturally such statistics do not mean much without an analysis of the individual cases. Statistics regarding the shock therapies will not be entirely valid without the latter, and without figures on control groups. Also, more time will be needed to determine whether the remissions that have been produced are permanent.

In conclusion I should like to say that the opinions which I have expressed in my article and in this letter are entirely my own, and not the opinion of all members of the staff of The Columbus State Hospital. There are some members of our staff who are enthusiastic about this form of treatment and we intend to continue further experimental work along these lines.—Beatrice Postle, M.D., Columbus, Ohio.

TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by the Component Society, the Ohio Public Health Association

FACTORS OF DELAY IN DIAGNOSIS

Of the 300 white adult patients studied, less than 2 per cent were classified as in the minimal stage, 45 per cent in the moderately advanced and 53.3 per cent in the far advanced stage. Ages ranged from 16 to 78 years. Seventy-six per cent of the females and 51 per cent of the males were under 35 years of age.

A history of tuberculosis in the immediate family was found in 28 per cent of the series. A striking feature was that almost twice as many females as males admitted a history of tuberculosis in the family. Evidently contact with the tuberculous patient in the home is more frequent among female members of the household for they usually have the responsibility of caring for and nursing the sick.

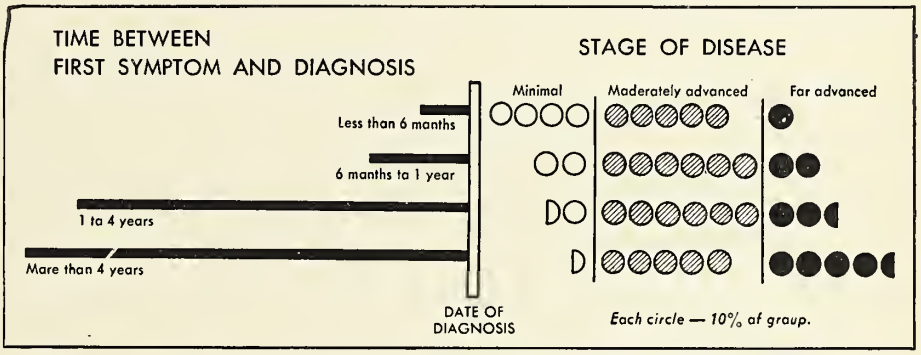
Prior to their admission to the hospital, the diagnosis was established in 61.6 per cent of the cases, was suspected in 19.6 per cent and was not made in 18.6 per cent. The high incidence of "suspected" cases is accounted for by the limited facilities of the average practitioner in Louisiana and the authors believe that if the Roentgen ray and laboratory aids were more widely used, diagnosis would be established in a greater percentage of cases.

The responsibility for delay in diagnosis when symptoms are present must be shared alike by the patient and the attending physician. Symptoms of a mild nature often seem negligible in the patient's estimation and thus he postpones medical consultation until more severe symptoms appear. In 2 of the 300 patients, the duration of symptoms before visiting the doctor averaged 2 months, and 2 more months elapsed before the diagnosis was established. At the other end of the scale are 90 patients who delayed almost 10 months before consulting the doctor and then suffered a further delay of about 12 months before the diagnosis was established.

Cough and expectoration were the most prominent initial symptoms and these also most frequently caused the patient to seek medical attention. In over 50 per cent of the cases, this symptom complex, although being the incentive for the visit, had been present for many months and undoubtedly was associated with constitutional symptoms of some degree. Yet these patients insisted that the accompanying symptoms were of little consequence and were not serious enough to interfere with their daily routine. True, pathology may be present in the lung parenchyma without any obvious symptoms as revealed in five cases reported wherein symptoms of sub-

jective importance were absent, while roentgenologic study revealed active pulmonary tuberculosis. Four of these cases were minimal, the fifth being moderately advanced. This does not necessarily imply that the number and duration of symptoms can be strictly correlated with the stage of the disease, for some of the patients volunteered the information that hemoptysis or pleurisy had been the initial symptom, and immediate skiagrams revealed either moderately or far advanced pulmonary tuberculosis.

Of all the symptoms listed, there is little variation between the initial and presenting symptoms, with the exception of hemoptysis. As an initial symptom it was present in 9.6 per cent of the cases, whereas 22.7 per cent sought medical aid because of blood spitting. This difference in percentage indicated that although these patients



Based on a study of the experience of 361 patients with tuberculosis made by Ruth A. Sedar. Social Research Series No. 5, National Tuberculosis Association.

had had previous symptoms a pulmonary hemorrhage was regarded with enough fear to prompt them to visit a physician.

Fever and night sweats, a combination of symptoms which in most textbooks is given a ranking position in the diagnosis of tuberculosis, were found with comparative infrequency in this series. As initial symptoms they were present in only 3.6 per cent, and as presenting symptoms, in 5 per cent of the cases.

The authors offer the following explanations for the failure in diagnosis on the basis of presenting symptoms:

Cough and Expectoration: The diagnosis was not suspected in 38.3 per cent of this group. This was probably due to the tendency on the part of physicians to diagnose prolonged or recurrent coughs as chronic bronchitis or chronic sinusitis.

Loss of Weight and Fatigability: Tuberculosis was not suspected in 50 per cent of these cases. Such diagnosis as nervousness, nervous breakdown, overwork, overindulgence in alcoholics and tobacco, dissipation, and chronic debilitating diseases were offered by the attending physician.

Hemoptysis: "Blood spitting," which has been known throughout the centuries as one of the pathognomonic symptoms of phthisis, was a frequent source of error in diagnosis. Although the percentage of failure (22.1) was less than that in other groups of symptoms, it is still too high. The absence of positive physical findings on examination of the chest probably accounts for such diagnoses as ruptured blood vessel, irritation of throat, and bleeding from nasopharynx.

Pleurisy: When a patient is seen only once, it is difficult to make a diagnosis unless a suspicion of tuberculosis is ever present in the physician's mind and the patient is urged to return for further observation after the acute attack subsides. Idiopathic pleuritis, though it may be accepted by the majority of physicians, should never be used as such until a sufficient interval has elapsed and the lung has remained clinically and radiologically negative. Failure to recognize this has resulted in 40.9 per cent mistaken diagnoses.

Fever and Night Sweats: Climatic and endemic conditions undoubtedly are the source of confusion as regards this symptom complex. With the high incidence of malarial infection in Louisiana, it is little wonder that a number of patients were treated previously with quinine, plasmochin or atabrine. This group leads all others in percentage of error, 73.3 per cent being neither diagnosed nor suspected.

Grippal: The diagnosis was missed in 40 per cent of the group presenting symptoms ordinarily attributed to an acute respiratory infection with or without physical signs of a pneumonitis. The constant occurrence of "flu" epidemics and the failure to realize that bed rest over a short period may render a tuberculous patient asymptomatic are the natural sources of error. As in any of the aforementioned symptoms complexes, suspicion of tuberculosis is of prime importance.

Factors Delaying the Diagnosis of Pulmonary Tuberculosis, Louis A. Monte, M.D., and Oscar Blitz, M.D., New Orleans Medical and Surgical Journal, Vol. 90, No. 8, February, 1938.

CASE RECORD PRESENTING CLINICAL PROBLEMS

Young Man, aged 19, extensive burns; rapidly appearing jaundice. Collapse. Death.

By HARRY L. REINHART, M.D.

A WHITE male, aged 19, was brought to the hospital with severe and extensive burns of the thighs. Shortly before his admission, someone poured kerosene on the patient's trousers and he struck a match to it "to see if it would burn"; it did. Except for manifestations of a psychopathic personality his past history was negative.

Physical examination revealed a temperature of 98.6°, pulse 92, respiration 20, blood pressure 120/80. The patient was well developed and nourished. He was fretful and uncooperative and was suffering from second and third degree burns covering both thighs and a small second degree burn of the dorsum of the left hand. The area involved was estimated to be from one-sixth to one-fourth of the total body surface.

Laboratory work on admission revealed a normal red blood count, white blood count and differential; the specific gravity of the urine was 1.007.

Hospital Course: Upon admisson he received Morph. Sulph. and the burned areas were surgically cleansed of all charred tissue and debris. The wounds were then sprayed with a freshly prepared 5 per cent aqueous solution of tannic acid which was repeated every 15 minutes. He was placed in bed on sterile sheets over which a light cradle was arranged to supply heat. He took fluids well by mouth and there was no evidence of shock; intravenous fluids were not considered essential immediately. On the first hospital day his temperature was 101°, pulse 140, and respirations 24; he was resting comfortably except for nausea and gradually increasing emesis, for which he received 1,500 cc. of 5 per cent glucose in saline intravenously. On the second hospital day temperature, pulse and respiration were 98°, 120 and 22. The vomiting persisted and intravenous fluids were continued. The wounds showed good eschar formation at this time. Urinalysis was negative except for a specific gravity of 1.030. During the evening of the second day his sclerae were slightly jaundiced. On the morning of the third hospital day he was quite restless and complained of nausea but did not vomit. The most outstanding clinical feature of the case at this stage was the rapidity of the development of the jaundice. The increasing intensity could be observed from hour to hour and even the lacrymal secretion was yellow and stained the sheets. Icterus index 83.3, Van den Bergh—direct, immediate positive reaction; quantitative bilirubin determination, 6.0 mgm per cent; blood urea nitrogen 86 mgm per cent. He rapidly became pulseless and went into a state of collapse. Stimulants and intravenous fluids were administered, and temporarily revived him. About two hours later he vomited a large amount of coffee ground material and suddenly expired.

This is the twenty-ninth of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

Dr. K. T. Langacher, Commentator:

The rational management of cases of severe and/or extensive superficial burns necessitates an understanding of the factors responsible for the morbidity and mortality of such cases. These factors should be anticipated and preventive therapy instituted immediately since they may be more easily prevented than controlled after they develop. The clinical course of a case following severe and extensive burns may be discussed in the following order: 1. Primary shock, 2. Secondary shock or toxemia and, 3. Bacterial infection.

Primary shock is a reflex phenomena which appears during the first eight hours and is associated with pain and fright. Although the patient may succumb during the initial phase, this stage usually passes rapidly into the second stage. Secondary shock or toxemia develops in about 24 hours, persists longer and is often more severe than primary shock. Formerly this stage was attributed to the formation and absorption of toxins from the burned area. The more recent work would seem to refute this concept and attribute secondary shock to altered metabolism resulting from a general outpouring of fluid into the intercellular tissue spaces resulting in a marked concentration of the blood. The local treatment of burns by the production of an eschar was designed to prevent the loss of fluid from the exposed surface. Although the eschar treatment is a definite aid in this respect, the loss of fluid and resultant concentration of the blood is a generalized exudative process, which is not confined to the burned area, and is not entirely controlled by local treatment. Third, bacterial infection from wound contamination usually is manifest in 36 to 48 hours and may induce or increase toxic symptoms.

The outstanding clinical manifestation of this case was the rapidity of development and the intensity of the jaundice. The immediate positive Van den Bergh reaction, the quantitative bilirubin determination of 6.0 mgm. per cent, the high Icterus Index and the rapidity of development and intensity of the jaundice justify the assumption of an obstructive type of jaundice, on the basis of which we may assume extensive liver destruction. The etiology of the liver damage may be a hypothetical toxin from the burned area, although in the light of more recent investigations and known facts, dehydration must be considered. The clinical course, the high blood urea nitrogen (86 mgm. per cent) and the similarity of this case to those of "acute hepatic insuffi-

ciency", or "liver deaths", in which dehydration has also been implicated, add weight to such consideration. The decreased urinary output, high specific gravity of the urine and loss of fluid by vomiting provide additional evidence suggesting dehydration. On the basis of such an assumption, a more careful study of water balance and repeated complete blood counts for evidence of marked concentration of the blood would seem to be indicated in cases with extensive burns. The time of death suggests a summation of the effects of the first and second stages as outlined above, with resulting destruction of liver and gastro-intestinal hemorrhage (coffee ground vomitus) as the terminal events.

The systemic treatment for primary shock, consisting of the judicious use of morphine to allay pain and fright, application of external heat, shock position and intravenous fluids to combat the relative reduction in blood volume associated with shock, was instituted, but apparently was insufficient. Since secondary shock is usually associated with a concentration of the blood due to exudation of fluids, they should be restored. The fluid lost is analogous to blood serum, and the ideal replacement fluid is blood serum. Too much blood serum may be needed for this to be practical unless a massive drip transfusion is available. Isotonic saline may supply the volume and salts although the serum protein loss is not compensated. A practical solution is the combination of transfusions and saline.

The local treatment consists of aseptic debridement followed by local measures designed to prevent fluid loss, reduce bacterial infection, control pain and permit healing to proceed normally. Freshly prepared 5 per cent aqueous tannic acid solution sprayed over the surgically cleansed area of the burn and repeated at 15 minute intervals until an eschar forms, meets most of these requirements. The time required for eschar formation and the potentialities of infection beneath the crust are features of this treatment which have stimulated the more recent investigation of the local treatment. Ten per cent silver nitrate used with tannic acid produces an immediate eschar and lowers the potentiality of infection. Numerous dyes have been suggested for topical application to burned areas because of their alleged bacteriostatic action and the non-injurious effects on tissues, among which are 1 per cent gentian violet and brilliant green. The results obtained from local treatment seem to depend largely on the experience and technique of the individual using it. It is very easy to focus attention on the local therapy to such an extent that the systemic aspects are neglected.

Dr. Reinhart: Anatomic Diagnosis:

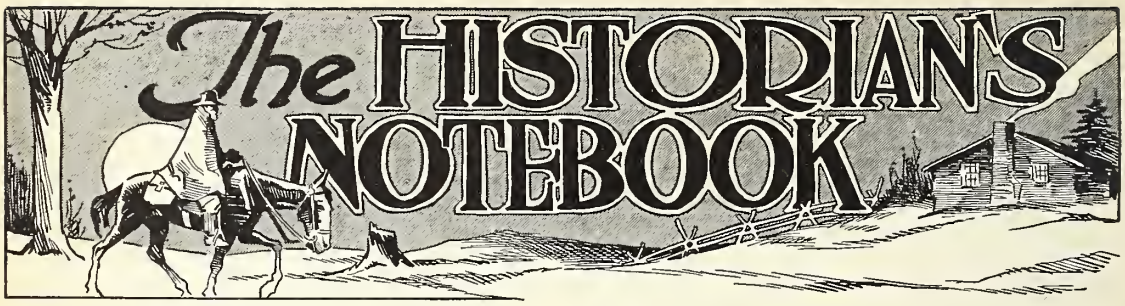
1. Diffuse intense jaundice. 2. Extensive eschars of the anterior and lateral surfaces of both thighs and the dorsum of the right hand. 3. Massive necrosis of the liver. 4. Nephrosis with multiple glomerular capillary thrombi. 5. Aspirated bloody vomitus in the bronchi and pulmonary alveoli. 6. Multiple punctate and diffuse hemorrhages of the gastro-intestinal tract, capsule of liver, endocardium, pleura, peritoneum and omentum.

The sequence of the lesions listed in the anatomic diagnosis may be arbitrarily listed in the following order: extensive burns of skin, shock, dehydration, toxemia (?), liver necrosis, nephrosis, hemorrhages, aspiration of bloody vomitus and death. Although these lesions are not infrequently encountered in varying degrees and combinations at necropsy following death from burns, they do not represent a characteristic anatomic picture of the systemic effect of burns. The variability of the pathological picture suggests the participation of many complex factors in the fatal termination of any specific case following extensive burns.

The etiology of the massive liver necrosis is the crux of both the clinical course and the anatomical lesions of this case. Secondary shock, hypothetic toxic substances derived from necrotic tissue and dehydration have been implicated not only in this case but in the extensive investigations of the pathology of burns. Probably all of these are interrelated in some degree in the varying clinical picture and morbid anatomy of burns. More recent investigations have focused attention on dehydration. Although dehydration is a demonstrable fact, and is an important clinical aspect of these cases, it does not per se produce the lesions here noted, and probably is not the only factor involved.

The question of water balance deserves careful consideration; it cannot be settled by routine orders, and evaluation by clinical judgment alone is often fallacious. The two extremes of dehydration and flooding the patient with fluids which he cannot utilize are equally dangerous. Both extremes may be avoided by careful evaluation of the basic nature of the pathology, clinical recording of water and food intake, water output, vomiting, diarrhea, sweating, respiratory rate, specific gravity and total amount of urine, accurate hemoglobin determinations and total red cell counts. Indications of serious import may be obtained by the determination of the non-protein nitrogen, blood urea nitrogen and "rest" nitrogen of the blood. A rise in the urea nitrogen is most significant in renal disease and a rise in the "rest" nitrogen fraction is found in dehydration (often called extra-renal uremia) and eclampsia.

The typical picture of a disease is not a snapshot; it is an ever changing cinema with an origin, a course, and a recovery, or a tragic end. —Fetterman.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

PROCEEDINGS OF THE GENERAL MEDICAL SOCIETY, 1829

By L. S. DEITCHMAN, M.D., Youngstown, Ohio

IF Dr. Paterson, the author of the most interesting article in the January issue, will permit me, I should like to add a few remarks on the pamphlet "An act to incorporate Medical Societies * * * in Ohio." The title page of this important piece of medical "Ohioana", which I happen to have, is reproduced. The pamphlet begins with a resolution introduced in both houses of legislature:

"Whereas, Well regulated Medical Societies have been found to contribute to the diffusion of true medical science, and a correct knowledge of the healing art:—

Therefore, Sec. 1. Be it enacted by the General Assembly of the State of Ohio, that the state be, and the same is hereby divided into twenty medical districts for the organization and establishment of medical societies as follows."

Follows a list of the counties and their combination into twenty (later, by other acts, extended to 22) medical districts, to correspond with the circuits of the court of Common Pleas.

Sec. 2, gives the names of doctors and their associates in each district. There is a noticeable sprinkling of biblical and quaint names as Jehu, Uriah, Havillah, Job, Elijah, Erastus, Peleg, Israel etc. Some of the doctors like * * * Norton and * * * Rilley lack the first name and one is simply noted as Charles * * *, showing an imperfect and hastily constructed list for a skeleton of the future organization.

"Provided, however, that no person shall be competent to be a member of any said societies, who shall not possess the qualifications specified in section 7."

Sections 3, 4, 6, 7, 8 and 9 provide details for the organization of District Societies with date of meeting, "last Tuesday of May next," meeting places, officers, their duties, qualifications for membership, etc.

Sec. 5, deals with election of Censors in each society "* * * whose duty it shall be carefully and impartially to examine all students in physic and surgery, and to report in writing their opinion of the qualification of such students to the president of their society, who shall thereupon give to each student so examined, if said report shall so recommend, a license under his hand and the seal of the society * * *, which license shall authorize the person obtaining the same to practice physic or surgery or both * * * in any part of this state * * *. Provided, however, that the Censors shall not examine any student unless he produce satisfactory evidence of his being of good moral reputation, and that he shall have regularly studied such profession with some respectable practitioner or practitioners for the term of three years, unless such student shall have received a collegiate education, in which case he shall not be required to have studied but two years."

"Sec. 10, that every person, who shall hereafter be licensed to practice physic or surgery in this state, shall deposit a copy of his license, with the clerk of the court of common pleas * * *, and until such copy shall be deposited, he shall be liable to the penalties of this act, in the same manner he would be liable if he had not obtained such license * * *."

Here we see an attempt at setting up a standard of educational requirements and regulation of licensing was given into the hands of the local medical fraternity. Time and experience trans-

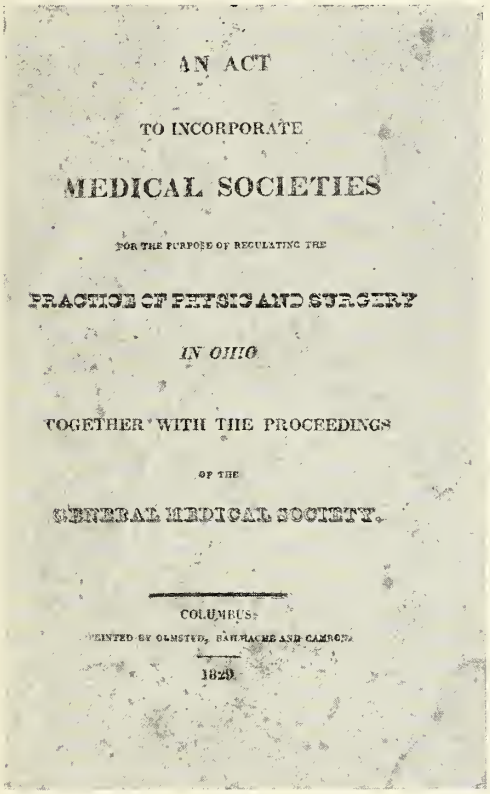
The Author

● Dr. Deitchman is a graduate of the University of Pennsylvania School of Medicine, 1921; member American Association of the History of Medicine.

My copy of the pamphlet was found in an attic. There must be many other early Ohio medical imprints, which need to be brought to light, knocking around in such places. I hope that Dr. Paterson's admirable article and this addendum will stimulate others to search for similar publications.

ferred the licensing power to a state board, which is as it should be, but the early plan of control by the local society had some virtues,—certainly from the standpoint of knowledge of the applicant's background.

"Sec. 11. That no person other than the member of said medical societies shall after the first day of July next be permitted to practice physic or surgery in the state; and if any person not being a member of said societies shall practice


AN ACT

TO INCORPORATE

MEDICAL SOCIETIES

FOR THE PURPOSE OF REGULATING THE

PRACTICE OF PHYSIC AND SURGERY

IN OHIO

TOGETHER WITH THE PROCEEDINGS

OF THE

GENERAL MEDICAL SOCIETY.

COLUMBUS:

PRINTED BY OLMSTED, HARLACKE AND CAMRON.

1829.

physic or surgery, he shall not be entitled to the aid of the law, or courts of this state in collection of any debt, arising or accruing from such practice * * *."

This really puts teeth into the act and makes membership in the society practically compulsory. I wonder whether or not we have progressed in making membership inessential for the practice of medicine. Of course, it is more consistent with present ideas of liberty.

It is not unreasonable to suspect that some practitioners of physic may have had a hand in the drafting of the act. Perhaps our own Dr. Henry Manning, a member of the legislature, about this time, who besides being a first class physician, was a good business man and politician, may have helped.

"Sec. 12. That the medical society aforesaid shall not either directly or indirectly, make any order, resolution or arrangement, defining or fixing the amount of compensation to be charged for any services * * *".

No fee schedule, if you please.

Sec. 13, 14, 15 and 16 provide for the establishment of the General Medical Society of the State of Ohio by convention of delegates from the District Society. "The first meeting thereof shall be holden on the second Monday of December A.D. 1827, in the town of Columbus." The details of election of officers, the drawing of a constitution and by laws, etc., are also provided for in these paragraphs.

"This act to take effect from its passage."

JOSEPH RICHARDSON,
Speaker of the House of Representatives.

ALLEN TRIMBLE,
Speaker of the Senate.

Feb. 26th, 1824.

And so this act provides for the organization of both local and state medical societies and coordinates the two.

The first meeting of the General Medical Society was duly "holden" in Dec., 1827, in the town of Columbus, as Dr. Paterson stated. Unfortunately the only reference to this meeting is found in the constitution of the society, which states that same was adopted in 1827 and is now, in Jan., 1829, amended. There is no mention of reading of minutes of the proceedings of the 1827 meeting or any other information. What a pity! Let us hope that somewhere there is a detailed record of this first meeting of the State Medical Association.

On the 5th day of January, 1829, "agreeable to the provisions of the constitution," the second meeting of the General Medical Society of the State of Ohio convened at Columbus, when the following representative members appeared, produced their certificates, and took their seats, to wit."

Being a sentimentalist, I feel it is deserving of these delegates that their names be listed. There is something heroic in the picture of those pioneer pilgrims of organized medicine, in the midst of the winter season, converging from the near and remote parts of the state, very likely through snow and slush, mostly on horseback, with Columbus as their Mecca. Drs. Bush, Dunlavy and Martin from near Cincinnati, Drs. Wright from Ashtabula, Dr. Manning from our neck of the woods, Drs. Bissell and Dixon from the West Virginian border, Dr. Edwin Smith from the southern tip of the state, all with a trek of some 175 to 200 miles. They probably started on New Year's day. At the same season we would debate whether to drive the car or take a train, and consider the trip somewhat of a chore. It took real guts to attend this meeting, and we can be certain that these men, better than we of the present generation, knew and appreciated the value of medical organization. So

here is the list, not imposing numerically, only seventeen men, but what men they must have been!

1st district	Dr. John E. Bush
2nd district	Dr. John C. Dunlavy
3rd district	Dr. Joshua Martin
4th district	Dr. Asa Coleman
7th district	Dr. Edwin Smith
9th district	Dr. Henry Manning
10th district	Dr. Thomas Pinkerton
11th district	Dr. Samuel Parsons
12th district	Dr. John Cotton
13th district	Dr. Robert McNeill
15th district	Dr. Thomas Flanner
16th district	Dr. Benjamin Dickson
17th district	Dr. Hezekiah Bissell
18th district	Dr. Pluto Wright
20th district	Dr. O. W. Hawley
21st district	Dr. John J. Brice
22nd district	Dr. Robert Thompson

The remaining pages of the pamphlet are devoted to the meeting itself, which was very much like any other business meeting, mostly routine. Officers were elected, committees met and submitted reports, resolutions were drawn; the constitution and by-laws, drafted and adopted at the 1827 meeting, were amended, etc.

Just before adjournment Dr. Daniel Drake, the medical lion of the West, was unanimously elected honorary member of the society.

The pamphlet ends with a full text of the constitution and by-laws of the General Medical Society of Ohio.

Edwin Weed Cowles

Edwin Weed Cowles, physician, born in Bristol, Connecticut, in the year 1794, removed to Austinburg with his father, the Rev. Dr. Cowles, in the year 1811. His ancestors were all of Puritan descent, except one line, which traced its origin to the Huguenots. On the Cowles side he was descended from one of three brothers who settled in the town of Farmington, Connecticut, in 1652, where his father was born. On his mother's side, who was a Miss Abigail White, of Stamford, Connecticut, he was a direct descendant of Peregrine White, the first white child born in New England. His grandmother on the Whites' side was descended from a Huguenot, by the name of DeGrasse, which name was subsequently changed to Weed. Rev. Thomas Hooker, the first clergyman who settled in Connecticut, was one of Dr. Cowles' ancestors. He was educated in the academy, Farmington, Connecticut, and was imbued by his father and mother with the highest principles of the Christian religion and love for his fellow-beings.

He studied medicine with Dr. O. K. Hawley, of Austinburg, and after receiving his degree he practiced medicine in Mantua, Portage county, Ohio, and in 1832 he removed with his family to Cleveland. In 1834 he removed to Detroit, and practiced there until 1838, when he returned to Cleveland, where he spent the remainder of his professional life, and made himself a high reputation both as a physician and a valuable citizen. His leading traits as a physician were the exercise of benevolence and fearlessness in the performance of his professional duties. These noble qualities were thoroughly illustrated when that great scourge, the Asiatic cholera, made its first appearance in Cleveland the first year he settled there. This disease was introduced by the arrival of the steamer "Henry Clay," which sailed up to the landing at the foot of Superior street. As usual in those early days, where there were no railroads and telegraph, the crowd assembled at the landing to hear the news and to see who had come. As the boat neared the wharf the captain appeared on the deck and exclaimed that "the cholera had broken out among his passengers and crew; that several were dead and a number more were down with it, and for God's sake to send a doctor aboard!" This announcement created a panic in the crowd. They all scattered and fled in every direction—many taking their horses and fleeing into the country. A messenger went hurriedly to the office of Dr. Cowles, and with a frightened expression of countenance informed him that his services were needed,—that "the boat was filled with the dead and sick." The doctor promptly started for the boat, and exerted himself immediately with all his power to alleviate the sufferings of the sick.

At a meeting held previously by the citizens of the then village of Cleveland it was voted that no boats having the cholera aboard should be allowed to come into port or land their passengers, for fear of contagion. Under this action of the citizens the "Henry Clay" was obliged to leave. Dr. Cowles volunteered to accompany the sick and look after them, and in spite of the remonstrances of his friends, who believed he would never get through alive, he accompanied this charnel-ship to Detroit.

His predominating trait was love of justice to all—the high and low, rich and poor. This sense was strongly developed in his hatred of the system of slavery, which, as he expressed it, "violated every commandment in the decalogue, every principle of justice, all laws of human nature, and destroyed the foundation of a common humanity." He was one of the first who came out publicly and avowed themselves "abolitionists," at a time when it was considered disgraceful to be called by that term. He was one of the oldest members of the "old Liberty Guard," and many a poor fugitive slave had he aided to freedom via the underground railroad. As a politician he was somewhat prominent. He supported the old Whig party down to the time he voted for General Harrison, in 1840. In 1841 he joined the "Liberty party," the germ of the present Republican party. He died in June, 1861, at the residence of his son, Mr. Edwin Cowles, in Cleveland.

SHALL WE LEAD OR BE LED?

Address of the Retiring President

By JOHN B. ALCORN, M.D., Columbus, Ohio

I WANT to thank you for the honor you have conferred upon me the past year by electing me to the presidency of this Association. My term of office has been one of satisfaction and benefit to myself. It has been a pleasure to work with the Council, the Headquarters Office staff and the different committees. I appreciate the cooperation of every officer and committeeman.

These Annual Meetings insure to our profession, healthy life and vigorous growth. We do not refer to numerical increase; and still less have we in mind pecuniary rewards, although we may hope that these will keep step with scientific advances. These meetings enable us to keep up with changing times. Regretful in many ways, we must face the economic issues that confront us, if we are not to become mere puppets of the State.

It is this coming together of earnest men, each with his individual experiences, but all with a single engrossing purpose, which keeps our science abreast of the times and ever ready for the next step forward. The full and candid presentation of our varied experiences, our mistakes and failures, no less than our successes, makes possible intelligent comparison, stimulates suggestion and leads to discussion, out of which each of us may surely gather something of profit.

These are facts to which it should not be necessary to call attention, but when one realizes the number of men in our profession who take no part in local societies or in any district, state or national organization, then one feels that too much cannot be said on the subject and an occasional reminder is pertinent.

Everyone recognizes the truth, that progress in our profession has been dependent on facts, observations and conclusions communicated by preceptor to student and recorded for future generations, each generation building on the foundation work of former generations. Progress in any profession bears a direct relationship to facilities for exchange and interchange of facts, information, knowledge and truth and to the proper use of these facilities.

The men of vision in the medical profession long ago realized that graduation from a medical college is not the end of a physician's training; rather it is only the beginning. The young practitioner and even more the older man must needs keep in constant touch with the new ideas, new technics and new discoveries that mark the almost daily advance of medicine.

It is with this in mind that our associations and societies have been formed. They provide the medium through which men preoccupied with office and family practice may keep in touch with the constantly growing body of medical knowledge.

The physician who scorns these associations loses many opportunities for improvement and soon deteriorates mentally and professionally. If, however, he attends meetings such as these with an open and attentive mind, he acquires the satisfaction that comes from a familiarity with the latest developments and the knowledge that he, too, can apply them in services to his patients.

A member should not attend the meetings of his association merely to receive, he should be willing also to give. For this reason, we call your attention to the importance of assigning as many members of the association as possible to the different committees. This will enhance their interest in organized medicine.

Many find it impossible to attend the state and national conventions. Our district and county meetings must therefore be of a high standard. To promote this ideal we should continue the allowance of $200 per year by the state association to aid district societies in defraying expenses of their meetings.

Furthermore, our association should continue to lend utmost support to the operation of postgraduate courses throughout the state and the maintenance of a speakers' bureau to assist county societies in arranging programs.

We should take issue with those critics of our profession who charge that for selfish reasons we have opposed the advance of preventive medicine. The record shows that the medical profession has taken the lead in promoting and establishing personal health and public health safeguards such as: Rigid sanitary laws, strict quarantine laws, regulations for the control of communicable diseases such as vaccination and immunization, establishment of official public health agencies and programs, provision for pure food, milk and water supplies, facilities for the mentally and physically handicapped, distribution and use of preventive and therapeutic serums, etc.

State and local health administrations should maintain close relationship with practicing physicians, because they cannot carry on without the medical profession.

The medical profession has taken an active part in the fight against tuberculosis and cancer. In fact the clinics established in the crusade to combat these plagues among the indigent are manned by physicians who give their time with-

Address of The President delivered at the First Session House of Delegates, Ohio State Medical Association, at the Ninety-First Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

out compensation. We are now demonstrating our interest in the anti-syphilis struggle by giving our endorsement and support to the fight of the U. S. Public Health Service against this disease, which is the greatest scourge to which mankind is exposed.

We welcome the help of an organization so carefully guided as the American Social Hygiene Association. This association has labored hard for many years to break down the barriers of a public opinion that has regarded venereal disease as a forbidden social topic.

The press is to be congratulated for its assistance in breaking down this interdiction. No longer are we compelled to speak in hushed voices on this formerly tabooed subject. We have the opportunity to show our willingness to cooperate with health authorities in the eradication of this great plague. We are confident the medical profession will meet this test firmly and successfully, but we must anticipate a long and arduous campaign.

The great majority of general practitioners are capable of adequately treating syphilis. It is our duty as a profession to see that our membership takes over this work promptly and effectively.

Those who are not familiar with modern methods of treatment may avail themselves of the opportunities offered by the State Department of Health and our medical centers.

Your Association's endorsement of the moving picture produced under the joint auspices of the Public Health Service and the American Medical Association has already brought results. The successful fulfillment of such a program will make the Ohio State Medical Association an organization of state-wide importance.

In national affairs, we are faced with the question of the provision of better and more adequate medical care for the lower income group. The responsibility for a satisfactory solution of this problem rests on the shoulders of leaders in organized medical groups all over our nation. As officials in medical organization in this state, this subject should command our most serious thought.

Now, the average physician is content to say simply that he opposes state medicine; support his contention with a few commonplace arguments, and let it go at that. However, in the course of some intensive research on this question and a study of socialized medicine, as it is exemplified in foreign countries, we have been made to realize the disastrous conditions which will result if the medical profession ever permits federalized medicine to become a reality, instead of, as it is in the present, the dream of a few misinformed, power-grasping politicians and social workers.

It is conceded, in those countries which have state medicine, that the beneficiaries of such a system consult the doctor in very large numbers. Also, it is conceded that the majority of those seeking relief have minor or imaginary ills, and that a surprisingly large percentage consider themselves too sick to work, and, therefore are entitled to draw sick benefits during their period of disability. Cash benefits paid in this manner are a severe drain on the public treasury and lead to investigations and other complications which are a source of much trouble, not only to the doctor but to the person who feels entitled to the benefits. Often it becomes necessary to curtail the lists of beneficiaries to preserve public funds and the lay officials in charge usually have ways of doing this in spite of the judgment of the doctor in charge of a case.

Socialized medicine goes in strongly for record keeping. The average doctor must spend much time, as a rule, filling out large numbers of blanks provided by the statistical department. That is the time which the doctor who practices private medicine usually devotes to reading his medical journals and his textbooks or adding to his scientific knowledge in other ways.

The district physicians in German villages holding state positions with a sure means of a meager livelihood, groan and curse under the burden of red tape, paper work, records in triplicate, requisitions, limited drugs and the like. The stimulus for personal improvement has ebbed away.

The average number of days of incapacity to work owing to ill health has risen from 5½ to 28 days during the period that state medicine has been in effect in Germany. In the United States the figure has not increased during that time.

Under the system of private practice as it exists in this country, there is one great feature which, in the opinion of most doctors and most patients, adds greatly to the service rendered, namely: The personal relationship between the doctor and the patient. This has become fixed in the customs of our people and it will continue until changed or destroyed by law. One well trained doctor may be as able as another to apply the truth of science in the treatment of disease, but the time comes in the life of each one of us when cold facts of science do not avail. The personal side of the practice of medicine, which has always played an important and comforting part, steps in at such times and renders a service which the people not only desire but demand. Sympathy, kindness, pity and cheerful hope—no amount of scientific efficiency can take the place of these in the dark hours of sorrow and trouble so common in the experience of all. President Eliot of Harvard said, "In these intangible things are found the durable satisfaction of life; fame dies and honors perish, but loving kindness is immortal".

We would not belittle the importance of science in medicine, nor would we magnify the personal element, yet we know from personal experience

what comfort, hope and assurance the personality of a trusted physician may bring to the bedside of his patients.

Socialization tends to destroy personal service. It places all of the emphasis on the scientific side and while the scientific side is greater, yet divorced from the personal element it is immeasurably weakened. Our system of private practice blends the two into one and thus the medical care received by the American people is the envy of the rest of the world. In no other nation has medicine wrought so well in bringing health and happiness and length of days to the fleeting span of life.

In socialized medicine politics enters more or less, often more, into the management. The cost to society is much greater than service through private practice. It does not promote the practice of preventive medicine. Its diagnostic service is inferior. The morbidity rate is greatly increased and the mortality from all the important diseases is greater than under private practice.

Recent comparisons of the mortality rates in tuberculosis and cancer in England, which has a system of state medicine, and the United States show that, whereas in England, the death rate from tuberculosis is 63.5 per hundred thousand and cancer 156.3 per hundred thousand, the figures in the United States for these same diseases are 51.2 and 106.3 respectively. Surely no argument for state medicine can be found in these comparisons.

The complaint is made by the advocates of change that the cost of medical care under our system of private practice is too high. No one has ever argued that medical care is not costly and that it does not sometimes fall with crushing effect upon the less fortunate but other misfortunes have a way of doing the same thing. It is rather certain that federalized medicine is able to distribute the cost of medical care in such a way that the burden is not so keenly felt by the beneficiary, but the cost to society, which is the true index of cost, is very much greater. The business setup which looks after the distribution of medical care in socialized and state medicine, employs a great many people, inspectors, bookkeepers, supervisors, and so forth, and these must receive a living wage.

Take, for example, Germany. In 1935 there were 36,000 employees of the non-medical personnel, and only 30,000 doctors. The politicians are supposed, in theory, to keep their hands off the business and professional setup of socialized medicine, but where they vote a considerable part of the money to pay expenses of the system, they naturally are interested in the management. Sometimes they take quite a bit of interest in it. In one European country, several thousand doctors have been deprived of the privilege of practicing medicine for the state because they incurred the displeasure of the political powers.

The threat of a nationally controlled plan is at our door. Let it be known that the medical profession is opposed to any form of state medical care, which would include all groups, regardless of economic status. It is well to recognize the great danger of such invasion by our government, and that the responsibility for an adequate plan of medical service should and must be worked out by organized medicine through the leadership of physicians, and physicians alone.

The medical profession should not pursue a policy of ignoring the signs of the times. We should study the economic situation in all of its relations to the practice of medicine. The subject should be approached in an ethical manner and a well-thought-out plan evolved to guide the profession in readjusting the physicians to the new age in which we are living. National, state and county leaders should plan constructive leadership in order that the rights of the individual physician be safeguarded, the public protected and the high ideals that have guided the conduct of our profession in the past, preserved.

In connection with these vital matters which I have discussed, permit me to urge each and every member of the Ohio State Medical Association to take an active personal interest in the study of medical care which is being undertaken at this time by the American Medical Association assisted by this Association, other state associations and all county medical societies. When a member receives an A.M.A. survey blank asking certain pertinent questions, he should fill out that blank to the best of his ability and return it to the person from whom he received it. That will be the part which each member will be asked to take. Other phases of the survey will be made by officers of county societies and special committees. The part which every member must take is the most essential phase of the entire survey. Unless each cooperates and does his part, the project will fail.

By means of this nation-wide study, the medical profession hopes to assemble important facts regarding the medical needs of the people and following analysis of these data, to devise a constructive program, or programs, for meeting proven needs. This study should strive to reveal the true situation in every county examined.

In conclusion, I wish to stress the importance of organization. Let us develop a spirit of comradeship among our members. Let us cast aside some of that intense individualism that has in the past encased the average physician in a shell of self-sufficiency. Let us encourage team work among our members and each member do his part to the best of his personal ability.

May the Ohio State Medical Association go forward in its mission to hold high the torch to guide the medical profession of Ohio along the road of honor and professional achievement to a greater destiny in the days that lie before us.

THE PRESIDENT-ELECT

SELECTION of Dr. Parke G. Smith, Cincinnati, as President-Elect of the Ohio State Medical Association at the Ninety-Second Annual Meeting in Columbus, May 11 and 12, again reveals that the House of Delegates is insistent that the highest office in the Association shall be occupied by none but those qualified by training, experience and character to merit the honor and to meet the responsibilities of that lofty position.

When he succeeds Dr. Barney J. Hein, Toledo, as president in 1939, Dr. Smith will be 48 years of age, having been born August 13, 1890, at Riley, Butler County, Ohio. His parents, Dr. and Mrs. H. H. Smith, Oxford, Ohio, are living, the elder Dr. Smith just having completed his fifty-fifth year in the practice of medicine as a general practitioner. Still hale and hearty, Dr. Smith, Sr., enjoys the pleasures of a rather extensive practice. He and Mrs. Smith were among those present when the House of Delegates conferred this high honor on their physician-son.

Parke G. Smith was educated in the public schools of Riley Township, Butler County, Miami University, and the University of Cincinnati. He received his medical degree at the College of Medicine, University of Cincinnati, in 1917. During his collegiate days he was a member of Phi Delta Theta and Alpha Kappa Kappa fraternities.

Soon after graduation from medical school, Dr. Smith enlisted in the Medical Corps of the United States Army and was given the rank of lieutenant. During the final year of the World War, he was attached to the staff of Evacuation Hospital No. 40, being discharged in June, 1919, with the rank of captain.

Following the war, Dr. Smith became an associate of Dr. Gordon F. McKim, Cincinnati, specializing in urology. They still are associates. The new President-Elect ranks high in his chosen specialty. This is revealed by the fact that he is a fellow of the American College of Surgeons, member of the American Urologic Association, member and past-president of the North Central Branch of the American Urologic Association, member of the Southern Surgical Association and a diplomate of the American Board of Urology. His membership in professional societies also includes fellowship in the American Medical Association.

Dr. Smith's active interest in medical organization dates almost from the day he began the active practice of medicine. After holding minor offices and committee posts in the Cincinnati Academy of Medicine, he was elected by his colleagues to the presidency of the second largest local medical society in the state. In 1933, Dr. Smith was elected to The Council of the Ohio State Medical Association to represent the First Councilor District, succeeding Dr. John A. Caldwell who was elected president-elect at the Annual Meeting held in the Fall of that year. As a member of The Council, Dr. Smith for two years served as chairman of the Council Committee on Annual Meeting Arrangements and served one year on the Committee on Scientific Work. During those years he played a leading part in revamping the Annual Meeting setup which has given to the membership during the past four years scientific programs of exceptional quality and scope. Also, he has served as a member of the Committee on Auditing and Appropriations which committee guides the financial destinies of the Association.

In his home city, Dr. Smith holds many professional posts, including the associate professorship of urology, University of Cincinnati, College of Medicine; chief clinician, Urologic Division, Out-Patient Dispensary, Cinicinnati General Hospital; and staff membership at Christ, Good Samaritan, General, Holmes and Children's hospitals. He always has taken an active interest in the civic and social life of Cincinnati. At present he is a Scottish Rite Mason, member of the Shrine, and a member of the University Club and Ft. Mitchell Country Club.

Active interest in his two hobbies—collecting early American glass and salt-water fishing off Bahama—afford Dr. Smith relaxation after office hours and during vacation periods.

Dr. and Mrs. Smith (the former Iva Irene Stock of West Alexandria, Ohio), reside at 2411 Auburn Avenue, Cincinnati.

OFFICIAL PROCEEDINGS OF THE HOUSE OF DELEGATES, OHIO STATE MEDICAL ASSOCIATION, 92ND ANNUAL MEETING COLUMBUS, MAY 11 AND 12, 1938

MINUTES OF FIRST SESSION

THE Ninety-Second Annual Meeting of the Ohio State Medical Association opened officially in the Main Dining Room, Neil House, Columbus, Ohio, at 9:30 A.M., Wednesday, May 11, 1938, with the first session of the House of Delegates.

Dr. Wm. B. Morrison, president of The Columbus Academy of Medicine, called the meeting to order. Dr. Morrison extended the official greetings of the Columbus profession and complimented Dr. Alcorn, the President, on a most successful tenure of office. He then presented Dr. Alcorn, who took the chair and officially called the House of Delegates to order.

The roll call was answered by 110 delegates and officers (see page 697 for official roll call).

On motion by Dr. Huston, seconded by Dr. Stewart and carried, the minutes of the House of Delegates sessions held during the 91st Annual Meeting in Dayton, April 28 and 29, 1937, were approved as published on pages 663 to 672, inclusive, of the June, 1937, issue of *The Ohio State Medical Journal.*

ADDRESS OF THE PRESIDENT

At this point, Dr. Alcorn presented his Presidential Address, published in full on pages 683 to 685 in this issue of *The Journal.*

REFERENCE COMMITTEES

The following reference committees, to handle various business matters coming before the House of Delegates, were appointed by President Alcorn:

Presidential Address—H. V. Dutrow, Dayton, chairman; P. A. Jividen, Rutland; Dow Allard, Portsmouth; John M. Thomas, Columbus; Guy E. Noble, St. Marys.

Resolutions—L. L. Bigelow, Columbus, chairman; E. O. Swartz, Cincinnati; G. A. Woodhouse, Pleasant Hill; J. V. Hartman, Findlay; D. J. Slosser, Defiance; G. F. Sykes, Cleveland; O. J. Walker, Youngstown; John A. Fraser, E. Liverpool; George F. Swan, Cambridge; Geo. G. Hunter, Ironton.

Annual Reports—E. B. Gillette, Toledo, chairman; W. A. Hoyt, Akron; O. P. Tatman, Chillicothe; C. T. Atkinson, Middletown; Geo. F. Linn, Norwalk; J. H. J. Upham, Columbus.

Credentials of Delegates—John Dean Boylan, Milford Center, chairman; John S. Hattery, Mansfield; R. B. Wynkoop, Ashtabula; Robert Conard, Wilmington.

Tellers and Judges of Election—James F. Wilson, Washington C. H., chairman; L. E. Wills, Waverly; V. N. Marsh, Painesville; G. M. Lane, Springfield; Edgar Northrup, McConnelsville.

Time and Place of 1939 Annual Meeting—C. G. LaRocco, Cleveland, chairman; Emil R. Swepston, Cincinnati; A. R. Basinger, N. Canton; John F. Wright, Toledo.

ANNUAL REPORTS

The annual reports of officers and committees, published in the April, 1938, issue of *The Journal*, were submitted by title only and referred to the Reference Committee on Annual Reports.

NOMINATING COMMITTEE

A Nominating Committee, consisting of one delegate from each of the Councilor Districts, was elected as follows:

First District—Otto J. Seibert, Cincinnati, chairman.

Second District—G. M. Lane, Springfield.

Third District—R. R. Hendershott, Tiffin.

Fourth District—W. D. Hickey, Leipsic.

Fifth District—E. F. Kieger, Cleveland.

Sixth District—W. K. Stewart, Youngstown.

Seventh District—John A. Fraser, East Liverpool.

Eighth District—M. A. Loebell, Zanesville.

Ninth District—Dow Allard, Portsmouth.

Tenth District—John M. Thomas, Columbus.

INTRODUCTION OF RESOLUTIONS

The following resolutions were introduced and referred, without discussion, to the Reference Committee on Resolutions:

Resolution A. Introduced by W. K. Stewart, Youngstown:

WHEREAS: The State Automobile License Fund has heretofore provided for hospital care of indigent automobile accident cases and

WHEREAS: No provision has been made for payment of medical and surgical services in such cases, and

WHEREAS: Such an omission constitutes discrimination against attending physicians and surgeons,

THEREFORE BE IT RESOLVED: That the appropriate committee of the Ohio State Medical Association be hereby instructed to prepare and employ all available means to have presented to the next session of the Ohio General Assembly, legislation to correct this inequity.

Resolution B. Introduced by W. K. Stewart, Youngstown:

WHEREAS: Policies with reference to the public health, and especially legislative activities pertaining thereto, have become a necessary and important function of organized medicine; and

WHEREAS, Public officials whose duties include the appointment of physicians dealing with the public health and medical problems are prone to make such appointments without consultation with or the aproval of the medical profession, and because this practice often is not in the best interest of the general public from a health standpoint; and

WHEREAS: State and county medical organizations, because of their intimate knowledge of health matters are best qualified to advise in the appointment of all physicians to public offices dealing with the sick and afflicted;

THEREFORE BE IT RESOLVED, That legislative committees of both state and county societies be urged to make special efforts to have all physicians dealing with public health and medical problems appointed by elected officials from lists of physicians submitted by the State or County Organizations, as the case may be.

Resolution C. Introduced by W. K. Stewart, Youngstown:

WHEREAS: At the Annual Meeting of the Ohio State Medical Association, in May, 1936, a resolution was adopted as introduced by Dr. H. V. Dutrow, of Dayton, Ohio, known as "Resolution 'I'", reading as follows:

"WHEREAS, Ohio statutes relating to the responsibility and procedure for the care of the needy sick by various political subdivisions are antiquated and in many instances impractical, and

"WHEREAS, Various state organizations interested in the problem of poor relief administration are planning studies of the present poor-relief laws,

"BE IT RESOLVED, That the Council of the Ohio State Medical Association is instructed to initiate a study of the laws governing medical services for the needy through a standing or special committee of the association, to ascertain how such statutes should, and can be revised and recodified, and to confer with other groups mutually interested in this question, and,

"BE IT FURTHER RESOLVED, That the Council, after approval of recommendations made by the above committee, and at the appropriate time, shall have authority to have legislation drafted incorporating such recommendations, and seek to have the same introduced in the Ohio General Assembly."

WHEREAS, The studies intended to be made by the above resolution have not been carried out by the committee selected;

THEREFORE, BE IT RESOLVED, That the House of Delegates discharge said committee and that the in-coming President is hereby directed to appoint a new committee with instructions to carry out the purpose of this resolution.

Resolution D. Introduced by C. E. Kinney, Cleveland:

WHEREAS: 1. There is developing a nation-wide interest in the hearing problem.

2. More and more hearing surveys are being conducted in the State of Ohio by different groups of persons.

3. The number of commercial firms selling audiometers and hearing aids is increasing at a great rate.

4. These firms are fostering legislation concerning compulsory hearing surveys and the licensing of audiometrists.

WHEREAS: In order that the medical profession of the State of Ohio may be able to give the public of Ohio better advice on all matters having to do with diminished hearing.

BE IT RESOLVED THAT: 1. The Ohio State Medical Association shall have a state committee, or sub-committee, for the prevention and amelioration of deafness. The method of appointment and the organizational placement of such committee shall be determined by The Council and executive officers of this association.

2. This association, through its executive officers, urge each and every component county society of this association to appoint similar local committees.

Resolution E. Introduced by John F. Wright, Toledo:

WHEREAS, The American Medical Association has undertaken a nation-wide study to collect information concerning medical needs which may be used to formulate preferable procedures to supply needs in accordance with established policies and local conditions, and

WHEREAS, State and county medical societies have been urged to assume leadership in their respective jurisdictions in this constructive project, and

WHEREAS, The success of the undertaking hinges largely on the degree of active cooperation and assistance given by individual physicians,

BE IT RESOLVED, That the Ohio State Medical Association, officially representing the medical profession of Ohio, endorses and pledges its active support to this study of medical care sponsored by the American Medical Association; will do everything possible to carry the survey to a successful conclusion in Ohio; and strongly urges each component society and each member of this Association to actively assist in obtaining the information sought, so that facts regarding medical needs and medical services in Ohio can be assembled and constructive procedures in supplying proven needs can be developed.

Resolution F. Introduced by the Executive Secretary on behalf of The Council:

WHEREAS, By vote of the House of Delegates in 1936, the purpose clause of the Constitution of the Ohio State Medical Association was revised, and

WHEREAS, This purpose clause governing the activities of the Ohio State Medical Association differs from the purpose clause in the Articles of Incorporation of the State Association, on file with the Secretary of State of Ohio,

BE IT RESOLVED, That the House of Delegates, through the adoption of this resolution, authorizes the filing of an amendment to the Articles of Incorporation of the Ohio State Medical Association with the Secretary of State so that the purpose clause in such Articles of Incorporation shall

conform to the purpose clause in the present Constitution of the Association, reading as follows:

"The purposes of this Association are to promote the science and art of medicine, and the protection of public health. More especially, the purposes of this organization shall be to federate and bring into one compact organization the entire medical profession of the State of Ohio, and to unite with similar organizations in other states to constitute the American Medical Association."

Resolution G. Introduced by E. R. Swepston, Cincinnati:

WHEREAS, There is being introduced and marketed an increasing number of hypnotic or somnifacient drugs, the continued use of which may produce dangerous, or even fatal results;

BE IT RESOLVED, That the Academy of Medicine of Cincinnati favors prohibiting the retail sale of such drugs, except by prescription of a physician, dentist, veterinarian, or other practitioner licensed to prescribe for the treatment, or prevention, of disease in man or animals.

BE IT FURTHER RESOLVED, That the Academy of Medicine of Cincinnati petitions the House of Delegates of the Ohio State Medical Association to advocate such restrictions.

INVITATIONS FOR 1939 MEETING

The following invitations for the 1939 Annual Meeting were presented:

Ross M. Knoble, Sandusky, on behalf of the Erie County Medical Society, inviting the State Association to meet at Cedar Point next year.

A. A. Brindley, Toledo, on behalf of the Academy of Medicine of Toledo and Lucas County, inviting the State Association to meet next year in Toledo.

The invitations were referred, without discussion, to the Reference Committee on Time and Place of Annual Meeting.

AMENDMENTS TO BY-LAWS

On behalf of The Council, the Executive Secretary presented the following amendments to the By-Laws, which amendments were published in the March, 1938, issue of *The Journal*, pages 328 and 329.

Chapter 2

Sec. 3. Arrears in Membership. A member of this Association shall be deemed delinquent and in arrears in all his relationships as a member from and during the period extending from January 1 of the current year until his dues and assessments shall have been received at the headquarters of this Association, having been transmitted by the designated officer of the component society of which he is a member.

Chapter 9

STANDING COMMITTEES

Section 1. Titles of Committees. The standing committees of this Association shall be the following:

1. Committee on Public Relations and Economics.
2. Committee on Scientific Work.
3. Committee on Education.
4. Judicial and Professional Relations Committee.

Sec. 2. Method of Appointment. The standing committees shall be appointed by the President with the approval of the House of Delegates. The President shall designate the chairman of each committee from among its members. One member shall be appointed to each of the following standing committees each year, for a term of five years: Committee on Public Relations and Economics, Committee on Scientific Work, Committee on Education, and Judicial and Professional Relations Committee. Provided, that at the 1938 Annual Meeting, members of the Judicial and Professional Relations Committee shall be appointed for terms of one, two, three, four and five years, respectively.

Sec. 6. Judicial and Professional Relations Committee. The Judicial and Professional Relations Committee shall consist of five members. It shall have the following duties:

(1) To investigate, at the request of The Council, questions and controversies arising under this Constitution and By-Laws and under the Principles of Medical Ethics of the American Medical Association and to serve as a board of review with respect to proposed amendments to the constitution and by-laws of a component society of this Association, submitting recommendations for the advice and guidance of The Council.

(2) To examine evidence submitted by a member who is sued or threatened with suit for alleged malpractice and advise him concerning the medical aspects of the case. The committee may inform such member as to the names of competent medical expert witnesses and may advise with the legal counsel of such member as to the medical aspects of the case; but the committee shall not furnish a member with legal counsel. With the approval of The Council, the committee may retain counsel to appear as amicus curiae on behalf of this Association in cases which may be pending in the courts where, in the opinion of the committee, the legal questions involved are of general interest to the members of this Association.

(3) To disseminate information relative to the causes of malpractice suits and methods of prevention to the members of this Association.

Following an explanation of the purposes of the proposed amendments by Dr. Hein, President-Elect, and a discussion by members of the House of Delegates, on motion by Dr. J. R. Jarvis, Van Wert, seconded by H. V. Dutrow, Dayton, and

carried, the amendments as presented were adopted.

The House of Delegates then recessed until Thursday noon, May 12.

MINUTES OF SECOND SESSION

The second and final session of the House of Delegates at the Ninety-Second Annual Meeting was called to order by President Alcorn, following a luncheon for delegates, officers, and members of the Columbus Committees on Arrangements, in the Main Dining Room, Neil House, on Thursday, May 12.

The roll call showed 106 delegates and officers present.

SELECTION OF TIME AND PLACE FOR 1939 MEETING

On behalf of the Committee on Time and Place of Annual Meeting, C. G. LaRocco, Cleveland, chairman, presented the following report:

The Reference Committee on the Time and Place for the Annual Meeting of the Ohio State Medical Association held several conferences. Careful consideration was given to the invitations for the 1939 Annual Meeting presented by the Toledo Academy of Medicine and the City of Toledo, and by the Erie County Medical Society and Cedar Point.

The committee has analyzed carefully the question of facilities of both cities, and has taken into consideration the matter of seasonal phases of the invitation presented by the Erie County Medical Society. Information presented by the Erie County Medical Society reveals a meeting at Cedar Point would not be feasible until the last two weeks in June—a mid-Summer meeting.

In view of these facts the Committee is of the opinion that the meeting of The Ohio State Medical Association in mid-Summer would not meet with the widespread approval of the membership. This would result in a lessened attendance and in all probability, a comparatively fewer number of technical exhibitors. Also should a meeting be held at that time there will undoubtedly be greater difficulty in securing program talent, due to the fact that this would be for many physicians the beginning of their vacation period.

Therefore, the Committee recommends to the House of Delegates that the 1939 meeting of the Ohio State Medical Association be held in Toledo, Ohio, the home of the incoming President, Dr. B. J. Hein, some time in May.

The committee at this time wishes to bring to the attention of the House of Delegates, the possibility of the 1939 Annual Session of the American Medical Association being held in Cleveland, in which case the committee recommends that no scientific program of the Ohio State Association be held in 1939, but that the business sessions of the House of Delegates take place in Cleveland at the time of the A.M.A. meeting. The members of the Ohio State Association could then take advantage of the splendid scientific programs presented at the Cleveland meeting of the A.M.A., should the meeting be held there.

It was moved by Dr. LaRocco, seconded by J. R. Tillotson, Lima, that the report be adopted. Following a prolonged discussion, on motion by Ross M. Knoble, Sandusky, seconded by J. R. Jarvis, Van Wert, and carried, the report of the reference committee was tabled and the Committee on Tellers and Judges of Election was ordered to poll the House of Delegates by roll call on the question: "Shall the 1939 Annual Meeting of the Ohio State Medical Association be held in Toledo or Cedar Point?"

The roll was called by counties. The result showed 73 votes for Toledo and 32 votes for Cedar Point. President Alcorn therewith declared Toledo as the place for the 1939 meeting.

On motion by J. R. Tillotson, Lima, seconded by M. A. Loebell, Zanesville, and carried, The Council was instructed to make arrangements for holding the 1939 meeting in Toledo some time in May.

It was moved by C. G. LaRocco, Cleveland, seconded by Wm. M. Skipp, Youngstown, and carried, that in event Cleveland is selected for the 1939 Session of the American Medical Association no scientific session shall be held by the State Association in 1939 and that business sessions of the House of Delegates in 1939 shall be held in Cleveland at the time of the A.M.A. Session.

REPORT OF COMMITTEE ON PRESIDENTIAL ADDRESS

H. V. Dutrow, Dayton, on behalf of the Reference Committee on Presidential Address, presented the following report which, on motion by Dr. Dutrow, seconded by I. P. Seiler, Piketon, was adopted:

To the House of Delegates:

Your committee submits for your consideration the following report upon the address of President J. B. Alcorn delivered at the opening session of the House of Delegates, Wednesday, May 11, 1938.

At the outset the committee wishes to compliment Dr. Alcorn upon the title of his address. It is eminently descriptive of the most important problem that has ever confronted the medical profession. We must meet the challenge or we will be compelled to submit to governmental and social regimentation without representation.

The President very properly urges the necessity for our members taking an active part in the programs of all of the component societies of organized medicine. It is to be lamented that the attendance at and participation in medical meetings is not what it should be. It is only through personal contact, observation, and the active discussion of papers presented in scientific meetings that the doctors can keep abreast of the constant changes in medical practice. No practitioner can do justice to himself or to his patients if he neglects this important duty. The committee strongly endorses the recommendation of the President regarding attendance at district meetings and believes that the allowance recommended by him to defray, in part, the expenses of these meetings is commendable. It is believed that the extension and improvement of postgraduate courses throughout the state through the Speakers Bureau will be productive of great good.

No one upon a moment of reflection can charge

the medical profession with selfishness when it must be realized that it is constantly working for the prevention of disease and the improvement of public health safeguards in the public interest. It has always seemed difficult for the non-medical public to understand why the medical profession should constantly be working for less sickness instead of more. It is absolutely essential that there be close relationship and cooperation, at all times, between public health officials and the profession. The activity of the United States Public Health Service in its anti-syphilitic campaign, together with the National Social Hygiene Association is commendable, but supervision must be exercised that these movements may be kept within the bounds of organized medicine. In order for these clinics to fulfill their full purpose they must be complete in every detail and not mere stations where shots in the arm are the only therapeutic measures used. The President rightly refutes the statement that few physicians are qualified to treat syphilis. This is not true and the accusations should be promptly denied when they are made. The publicity given, through the press and over the radio, to the improvements of the facilities afforded by members of organized medicine has been a great help in acquainting the public with the needs for adequate scientific treatment of these so-called social diseases.

Dr. Alcorn reflects wide knowledge of the question of socialized medicine. This subject we believe to be the most important facing the medical profession of this country at the present time. All we have to do is to take a look at what has happened in Germany and England to get a clear perspective of this publicized medical Utopia.

Your President very aptly calls your attention to the staggering cost and the enormous amount of paper work that must be done by physicians in the proposed setup. Reports from countries, who have had for many years socialized medicine, proves that instead of a reduction in the morbidity and mortality rates there actually was an increase. They are much higher in those countries than in our own. The medical services rendered our people are the best of any nation in the world and it can be maintained on that high plane only through free enterprise, free competition, and the free choice of physician. Your committee is cognizant of the fact that with improvement in the economic situation, with our people getting back to work, that most of the clamor for state medicine will have vanished. In America it is more jobs that we need, not more laws, rules and regulations.

While some critics for the last decade or two have felt that organized medicine was rather dilatory in conforming to the economic changes that were taking place, we are confronted today with the absolute necessity of our undivided support of the democratic system of organized medicine to the end that we may better protect the heritage of our honorable profession against all outside selfish and political interests. Your committee wishes to reemphasize the need, urged so strongly by the President, for every member of the Association to promptly fill out and return the blank pertaining to the A.M.A. study of medical care. This is the most important survey ever to be undertaken by the profession. Dr. Alcorn, in the concluding paragraph of this address, very wisely emphasized the need for complete solidarity in the ranks of medicine.

In conclusion, we wish to earnestly endorse the President's expression of appreciation of the excellent work done by all of the personnel in the Columbus office of the Association.

REPORT OF COMMITTEE ON ANNUAL REPORTS

The Report of the Reference Committee on Annual Reports was presented by E. B. Gillette, Toledo, chairman of the committee, reading as follows:

Members of the House of Delegates:

The Reference Committee on Annual Reports appointed by the President of the Ohio State Medical Association has studied and carefully discussed the Annual Reports which were published in the April issue of *The Ohio State Medical Journal* and wishes to submit the following report:

1. **The Committee on Public Relations and Economics.**

The Reference Committee wishes to commend the members of the Public Relations Committee for the great amount of time and effort which it has expended in carrying out the work of this part of the Ohio State Medical Association. In the medical programs which have been fostered by the State or National Governments, the principle of the free choice of physician has steadfastly been adhered to by the committee. Recommendations have been made that any scheme of government control over the medical care for those who are unable to pay for it, "should be the responsibility of local government in cooperation with county medical societies, assisted financially, if necessary, by the State Government". If these recommendations are carried out and backed diligently by the medical profession, better medical care can be provided than under any Federal or State program. The committee reports that the present situation in poor relief is far from satisfactory. However, "it is assembling definite constructive propositions which can be submitted to the State Legislature as a basis for general revision of the relief statutes". It is hoped that in this way the "present haphazard emergency relief program must eventually be abandoned in favor of an adequate permanent program".

The committee took part in advising the Industrial Commission in making silicosis a compensable occupational disease, and assisted, by its advice, in establishing a Board of Silicosis Referees.

2. **The Committee on Education.**

This committee acted in an advisory capacity to the officers of the District Meetings as well as actively furnishing speakers to many of the county medical societies. It has sponsored certain public health educational programs to both physicians and the laity. The Regional Postgraduate Lectures, which were arranged by this committee, were well planned and carried out. The campaigns against syphilis and cancer should be carried along year after year by future committees. The course of diagnosis and treatment of syphilis given by the Lakeside Hospital in Cleveland, under the auspices of the United States Public Health Service, should be prominently announced in *The Journal* of the Ohio State Medical Association, so that its members would be apprised of the fact that such a course is available. The Committee is to be congratulated on the progress it has made in being of service to both the medical profession and the public. It has set a high mark at which future committees should endeavor to aim.

3. **The Committee on Medical Defense.**

It is unfortunate for the membership that the medical defense plan, of necessity, was discontinued; however, the committee has carried on in an educational and advisory capacity. The committee recommends that the "State Medical Association always should have some competent committee to inform members being sued for alleged malpractice where they may obtain competent expert witnesses; to advise members regarding the medical aspects of malpractice cases; to confer with the legal counsel of members being sued or threatened with suit on the medical aspects of litigation; and to retain counsel to appear as amicus curiae on behalf of the State Association in cases which may be pending in the courts where the legal questions involved are of general interest to all members of the Association. If the individual physician does his best to guard against avoidable errors and mistakes, uses reasonable caution, skill and diligence, keeps himself abreast of medical progress, familiarizes himself with the legal responsibilities and obligations, avoids making derogatory comments about his fellow practitioners, and carries on his practice in an honest, conscientious manner, he may feel reasonably safe. At the time he will be contributing much toward preserving the reputation of the entire medical profession and high standards of medical practice, thereby insuring the public of good medical care." The Medical Defense Committee is to be commended upon its years of faithful and conscientious service to the members of the Ohio State Medical Association.

4. **Annual Report of Treasurer and Committee on Auditing and Appropriations.**

The books of the Ohio State Medical Association and *The Ohio State Medical Journal* were audited by Keller, Kirschner and Martin, Certified Public Accountants, of Columbus. The Reference Committee approves of the report as presented.

On **motion** by Dr. Gillette, seconded by A. W. Carley, Dayton, the report of the committee was **adopted.**

REPORT OF COMMITTEE ON RESOLUTIONS

The following Report of the Reference Committe on Resolutions was presented by Leslie L. Bigelow, Columbus, chairman:

To the House of Delegates:

Seven resolutions, presented at the First Session of the House of Delegates, Wednesday, May 11, 1938, were referred to the Reference Committee on Resolutions.

At a meeting of the committee, with all 10 of its members present, the resolutions were carefully considered. They are returned to the House of Delegates with the recommendations of the committee as follows:

Resolution A

Resolution A, introduced by Dr. Stewart of Mahoning County, calls attention to a state law providing for the reimbursement of hospitals caring for indigents injured in motor vehicle accidents from a special state fund of the State Highway Department and asks for similar legislation that would enable physicians and surgeons to be compensated for their services on such cases from that special state fund, or a similar fund. The resolution, as presented, reads as follows:

"WHEREAS, The State Automobile License Fund has heretofore provided for Hospital Care of Indigent Automobile Accident Cases, and,

"WHEREAS, No provision has been made for payment of medical and surgical services in such cases, and

"WHEREAS, Such a commission constitutes discrimination against the attending physicians and surgeons,

"THEREFORE BE IT RESOLVED, That the appropriate committee of the Ohio State Medical Association be hereby instructed to prepare and employ all available means to have presented to the next General Assembly of the State of Ohio legislation to correct this inequity."

The records show that this matter, through similar resolutions, has engaged the consideration of The Council, committees, and the House of Delegates of this Association several times during the past six or seven years. In October, 1932, The Council adopted a report of the Committee on Public Policy opposing action contemplated by the resolution now under discussion. In December of that same year The Council, in considering a report of its Legislative Committee, continued its opposition. Again, in December, 1934, Dr. Upham, on behalf of the Committee on Public Policy, submitted an extensive report on the policy with reference to automobile injury cases which was given approval and adopted by The Council. This report held that it would be inadvisable, as well as impractical, to ask the Legislature for a special bill to compensate physicians for services to indigents injured in automobile accidents from a special fund created for that particular purpose. The Annual Report of the Committee on Public Policy in 1935 considered the subject once more, marshaling at some length its reasons for declining to endorse or support legislation of this character. The adoption of the recommendations made by the Committee on Public Policy in its Annual Report of 1935 indicated the official attitude of the House of Delegates. Finally, at the Annual Meeting in 1936 the House of Delegates, in approving and adopting a report of the Reference Committee on Resolutions concerning Resolution E, presented at that Annual Meeting, for the fourth time rejected a proposal to compensate physicians from a fund created especially to care for that particular class of indigents.

A brief statement of the reasons for rejection of this recurring proposal is well summarized in the words of the Committee on Public Policy in its report for 1935 reading, in part as follows:

"It has been felt that it would be inconsistent to support a proposal for centralized, governmental medicine for one type of disability and to continue to oppose general socialization of medicine; that the medical profession was divided in its

attitude on this question; that serious difficulties would be encountered in promoting legislation which might weaken the position of the medical profession with members of the Legislature on other much more important legislation; that these cases are relatively few and entirely incidental to the large problem of medical care to the needy generally and that our efforts should be concentrated on securing improvements in the general laws relating to medical care of the poor; that such legislation might open up the field of governmental medicine for others than those actually in need, due to the loosely-worded definition in the hospital compensation act of the term 'indigent'; and that local subdivisions, through regular relief departments, rather than the state, should reimburse physicians for services to all indigents, whether suffering from injuries received in automobile accidents or other physical disabilities."

For these reasons, the Committee on Resolutions recommends that Resolution A be **not** adopted.

On **motion** by Dr. Bigelow, seconded by E. O. Swartz, Cincinnati, and **carried**, the report of the committee on Resolution A was **adopted.**

Resolution B

Resolution B, presented by Dr. Stewart of Mahoning County, with minor amendments of phraseology made by the committee, reads as follows:

"WHEREAS, Policies with reference to the public health, and especially legislative activities pertaining thereto, have become a necessary and important function of organized medicine; and

"WHEREAS, Some public officials whose duties include the appointment of physicians dealing with the public health and medical problems are prone to make such appointments without consultation with or the approval of the medical profession, and because this practice often is not in the best interest of the general public; and

"WHEREAS, State and County medical organizations, because of their intimate knowledge of health matters are best qualified to advise in the appointment of all physicians to public offices dealing with the sick and afflicted;

"THEREFORE BE IT RESOLVED, That legislative committees of both State and County Societies be urged to make special efforts to have all physicians dealing with public health and medical problems appointed by elected officials from lists of physicians submitted by the State or County Organizations, as the case may be."

Your Reference Committee recommends that Resolution B be approved by the House of Delegates.

On **motion** by Dr. Bigelow, seconded by C. C. Sherburne, Columbus, and **carried**, the report of the committee on Resolution B was **adopted.**

Resolution C

Resolution C, presented by Dr. Stewart of Mahoning County, reads as follows:

"WHEREAS, At the Annual Meeting of the Ohio State Medical Association, in May 1936 a resolution was adopted as introduced by Dr. H. V. Dutrow of Dayton, Ohio, known as 'Resolution I', and

"WHEREAS, Ohio statutes relating to the relows:

> " 'WHEREAS, Ohio statutes relating to the responsibility and procedure for the care of the needy sick by various political subdivisions are antiquated and in many instances impractical, and
>
> " 'WHEREAS, Various state organizations interested in the problem of poor relief administration are planning studies of the present poor relief laws,
>
> " 'BE IT RESOLVED, That the Council of the Ohio State Medical Association is instructed to initiate a study of laws governing medical services for the needy through a standing or special committee of the Association, to ascertain how such statutes should, and can be revised and recodified, and to confer with other groups naturally interested in this question, and
>
> " 'BE IT FURTHER RESOLVED, That the Council, after approval of recommendations made by the above committee, and at the appropriate time, shall have authority to have legislation drafted incorporating such recommendations, and seek to have the same introduced in the Ohio General Assembly.'

"WHEREAS, The studies intended to be made by the above resolution have not been carried out by the Committee selected,

"THEREFORE BE IT RESOLVED, That the House of Delegates discharge said committee and that the incoming President is hereby directed to appoint a new committee with instructions to carry out the purpose of this resolution."

This resolution would seem to imply that the Sub-Committee on Poor Relief should be discharged and replaced by another committee because of indifference to its mission. As a matter of fact, the State Legislature, being in special session during the life of this committee and engaged in emergency so-called "stop-gap" relief legislation, there was no possibility that any constructive, permanent relief program would receive any consideration by the General Assembly. For that reason, the Sub-Committee on Poor Relief has intentionally deferred its study of this question until this Summer and Fall, during which period it has plans to meet with other interested groups to formulate a program which can be presented at the next regular session of the General Assembly, convening in January, 1939, when there will be at least some hope that legislative action may be taken.

The Committee on Resolutions, therefore, sees no need for the adoption of this resolution with its implied criticism of a committee which intends to fulfill its responsibilities at the appropriate time. Moreover, it should be stated that the Sub-Committee on Poor Relief, referred to in the resolution, automatically goes out of existence at this Annual Meeting to be reappointed or replaced at the pleasure of the Committee on Public

Relations and Economics with the approval of The Council.

Therefore, your Reference Committee recommends that Resolution C be **not adopted** as its adoption would preclude the reappointment of this particular sub-committee, the members of which were selected because of their special interest in the problems of medical relief.

On **motion** by Dr. Bigelow, seconded by J. R. Tillotson, Lima, and **carried**, the report of the committee on Resolution C was **approved** and **adopted.**

Resolution D

Resolution D, presented by Dr. Kinney of Cuyahoga County, reads as follows:

"WHEREAS, 1. There is developing a nation-wide interest in the hearing problem,

2. More and more hearing surveys are being conducted in the State of Ohio by different groups of persons,

3. The number of commercial firms selling audiometers and hearing aids is increasing at a great rate,

4. These firms are fostering legislation concerning compulsory hearing surveys and the licensing of audiometrists, and

"WHEREAS, In order that the Medical Profession of the State of Ohio may be able to give the public of Ohio better advice on all matters having to do with diminished hearing, let it

"NOW THEREFORE BE RESOLVED THAT:

1. The Ohio State Medical Association shall have a state committee, or sub-committee, for the Prevention and Amelioration of Deafness. The method of appointment and the organizational placement of such committee shall be determined by The Council and Executive Officers of this Association.

2. This Association, through its Executive Officers, urge each and every component county society of this Association to appoint similar local committees."

The Resolutions Committee is heartily in sympathy with the content of this resolution. However, because the records show that ample provision has already been made by the Sub-Committee on Public Health Education for the realization of all that is contemplated by this resolution, and because this makes unnecessary the creation of a new special committee, your Reference Committee therefore recommends that Resolution D be **not adopted.**

On **motion** by Dr. Bigelow, seconded by J. R. Jarvis, Van Wert, and **carried**, the report of the committee on Resolution D was **adopted.**

Resolution E

Resolution E, presented by Dr. Wright of Lucas County, places special emphasis on the vital importance of the nation-wide survey on medical needs now being made by the American Medical Association. This resolution reads as follows:

"WHEREAS, The American Medical Association has undertaken a nation-wide study to collect information concerning medical needs which may be used to formulate preferable procedures to supply needs in accordance with established policies and local conditions, and

"WHEREAS, State and county medical societies have been urged to assume leadership in their respective jurisdictions in this constructive project, and

"WHEREAS, The success of the undertaking hinges largely on the degree of active cooperation and assistance given by individual physicians,

"BE IT RESOLVED, That the Ohio State Medical Association, officially representing the medical profession of Ohio, endorses and pledges its active support to this study of medical care sponsored by the American Medical Association; will do everything possible to carry the survey to a successful conclusion in Ohio; and strongly urges each component society and each member of this Association to actively assist in obtaining the information sought, so that facts regarding medical needs and medical services in Ohio can be assembled and constructive procedures in supplying proven needs can be developed."

This survey places responsibility directly on each individual physician. In recommending the adoption of this resolution, your committee expresses its deep conviction that cooperation in this survey is the duty of every member of this Association.

On **motion** by Dr. Bigelow, seconded by Dr. John M. Thomas, Columbus, and **carried**, the report of the committee on Resolution E was **adopted.**

Resolution F

The purpose of Resolution F, introduced by The Council, is clearly apparent. It reads as follows:

"WHEREAS, By vote of the House of Delegates in 1936, the purpose clause of the Constitution of the Ohio State Medical Association was revised, and

"WHEREAS, This purpose clause governing the activities of the Ohio State Medical Association differs from the purpose clause in the Articles of Incorporation of the State Association, on file with the Secretary of State of Ohio,

"BE IT RESOLVED, That the House of Delegates, through the adoption of this resolution, authorizes the filing of an amendment to the Articles of Incorporation of the Ohio State Medical Association with the Secretary of State so that the purpose clause in such Articles of Incorporation shall conform to the purpose clause in the present Constitution of the Association, reading as follows:

" 'The purposes of this Association are to promote the science and art of medicine, and the protection of public health. More especially, the purposes of this organization shall be to federate and bring into one compact organization the entire medical profession of the State of Ohio, and to unite with similar organizations in other states to constitute the American Medical Association.' "

The adoption of this resolution is recommended.

On **motion** by Dr. Bigelow, seconded by James A. Beer, Columbus, and **carried**, the report of the committee on Resolution F was **adopted.**

Resolution G

Resolution G, introduced by Dr. Swepston of Hamilton County, with minor amendments, reads as follows:

"WHEREAS, An increasing number of hypnotic and somnifacient drugs are being sold without safeguarding restrictions, and

"WHEREAS, The popular interest in sulfanilamide is leading to its employment by patients on their own initiative and without proper medical advice, and

"WHEREAS, The continued or indiscriminate use of such drugs may cause dangerous or fatal results,

"THEREFORE BE IT RESOLVED, That the Ohio State Medical Association favors, in the interest of public health, legislation which would prohibit the retail sale of such drugs except on prescription of a physician, dentist, or veterinarian."

The Reference Committee recommends the adoption of the resolution as amended.

On **motion** by Dr. Bigelow, seconded by E. B. Gillette, Toledo, and **carried**, the report of the committee on Resolution G was **adopted.**

On **motion** by Dr. Bigelow, seconded by John F. Wright, Toledo, and **carried**, the Report of the Reference Committee as a whole was **adopted.**

VOTE OF APPRECIATION

At this point, on **motion** by J. V. Hartman, Findlay, seconded by E. J. McCormick, Toledo, and **carried**, the House of Delegates expressed sincere appreciation to the Columbus Academy of Medicine for its hospitality and splendid arrangements; thanked the local committees for their efficient work, and the Columbus newspapers for their accurate and comprehensive coverage of the meeting; and complimented the Neil House for its excellent services.

ELECTION OF THE PRESIDENT-ELECT

Nominations for the office of President-Elect were called for by President Alcorn.

Leslie L. Bigelow, Columbus, placed in nomination the name of Parke G. Smith, Cincinnati, completing his fifth year as a member of The Council from the First District. The nomination was seconded by John F. Wright, Toledo, and D. C. Houser, Urbana. There being no further nominations, on **motion** by I. P. Seiler, Piketon, seconded by J. R. Tillotson, Lima, and **carried**, the nominations were closed and the Secretary was instructed to cast the unanimous ballot of the House of Delegates for Parke G. Smith, Cincinnati, as President-Elect. **So recorded and announced.**

Dr. Bigelow was appointed by President Alcorn to notify Dr. Smith of his election, which was done, and Dr. Smith was escorted to the rostrum and offiically presented to the House of Delegates.

ELECTION OF A.M.A. DELEGATES AND ALTERNATES

On behalf of the Committee on Nominations, Otto J. Seibert, Cincinnati, chairman, presented the following nominations for delegates and alternates to the American Medical Association:

For the year 1938, succeeding the late J. P. DeWitt, Canton, as delegate:

G. F. Zinninger, Canton, delegate.

For the year 1938, succeeding G. F. Zinninger as alternate:

Wm. M. Skipp, Youngstown, alternate.

As delegates and alternates, respectively, for the years 1938-1940:

Charles W. Stone, Cleveland, delegate
John B. Alcorn, Columbus, alternate

Ben R. McClellan, Xenia, delegate
D. W. Hogue, Springfield, alternate

Carl R. Steinke, Akron, delegate
C. C. Sherburne, Columbus, alternate

E. R. Brush, Zanesville, delegate
V. N. Marsh, Painesville, alternate.

On **motion** by Dr. Seibert, seconded by Lewis W. Cellio, Carrollton, and **carried**, the Report of the Nominating Committee was **adopted.** There being no nominations from the floor, on **motion** by Leslie L. Bigelow, seconded by E. M. Huston, Dayton, and **carried**, the Secretary was instructed to cast the ballot of the House of Delegates for the above nominees. **So recorded and announced.**

ELECTION OF COUNCILORS

Dr. Seibert, on behalf of the Committee on Nominations, placed in nomination the following to serve as Councilors for 1938-1940:

First District—L. Howard Schriver, Cincinnati, succeeding Parke G. Smith, newly-elected President-Elect.

Third District—O. P. Klotz, Findlay, Incumbent.

Fifth District—E. P. McNamee, Cleveland, succeeding Harry V. Paryzek, Cleveland.

Seventh District—C. W. Kirkland, Bellaire, Incumbent.

Ninth District—I. P. Seiler, Piketon, Incumbent.

On **motion** by Dr. Seibert, seconded by John M. Thomas, Columbus, and **carried**, the report of the Nominating Committee was **adopted.** There being no nominations from the floor, on **motion** by John F. Wright, Toledo, seconded by E. M. Huston, Dayton, and **carried**, the Secretary was instructed to cast the ballot of the House of Delegates for the foregoing nominees. **So recorded and announced.**

INSTALLATION OF NEW PRESIDENT

At this point, Dr. Alcorn, the retiring President, expressed appreciation for the splendid assistance he had received from many members during his term of office and presented his suc-

cessor, B. J. Hein, Toledo, wishing him a successful term of office.

In accepting the gavel from Dr. Alcorn, Dr. Hein made these remarks:

"Gentlemen:

"Last year the House of Delegates of the Ohio State Medical Association elevated me to the high office of President-Elect. I realize that this is the highest honor it can confer upon one of its members. I am happy and grateful for this honor. Because I have served for the past seven years as an officer I am aware of the great responsibilities which this office carries with it. I can assure you that I will do everything possible to make this coming year a success and to justify the trust you placed in me.

"The Ohio State Medical Association means much to our scientific and economic well-being, and never before has its importance to the physicians of Ohio been so manifest as during the past seven or eight years. During this period the economic phase has occupied a major portion of our time, and has presented many perplexing problems to this Association. That we have always solved them rightly cannot be said, but it can be said with certainty that your Council has studied them all carefully, and at all times used its best judgment, keeping in mind what is for the best interest of the patient and our profession. Occasionally under stress of economic unrest, expediency made certain decisions necessary. I refer particularly to the problem of relief for the indigent in the state. With the creation of numerous bureaus for the administration of relief, together with overlapping of Federal, State and County responsibility (both financial and administrative) this whole problem becomes a very complicated affair. It must be remembered that our whole Medical Relief Administration is still in a state of emergency and much thought will have to be given it by your Council and officers in the future. We have in the past always tried to preserve the time-honored patient-physician relationship, and have insisted upon the free choice of physician. I hope that we shall continue to do so. In this, up until the present, we have been largely successful; the future will depend largely upon our own solidarity and activity as a Medical Organization.

"Recently the American Medical Association initiated an extensive survey of the entire country in an endeavor to ascertain the adequacy of medical care. This survey represents the first attempt by our national organization to accumulate data on the subjects of clinics, hospitals, free service, etc., and will be useful in future decisions. Our course must be facts first, then policies based upon these facts, later. In this survey the various county societies will be asked to carry on this work. May we urge your wholehearted cooperation in your home counties, as this information is vital both to the public and the medical profession.

"These are only two of our problems. There are many more which will require our study as they have in the past. In the consideration of all these problems, may I, on behalf of the Council and myself, ask your cooperation as you have given it in the past. Many will be called upon for counsel and advice, while others will be asked to serve on important committees. With this cooperation and team work I am sure the year 1938-1939 will go down in the annals of the Ohio State Medical Association as one of additional accomplishment and success.

"My hope is that our Association will continue, and enlarge upon, the splendid postgraduate educational program which proved so successful during the past year. With your loyal support additional improvement can be made in *The Ohio State Medical Journal* which has made so much progress during the past two years and now ranks among the leaders in the field of medical publications. We should continue to assist and cooperate with various state departments, such as the Industrial Commission, State Department of Health, State Welfare Department, and other governmental agencies, so as to guide those departments on medical and health matters and help them evolve programs for the good of the public and in keeping with sound scientific and professional principles.

"There are those who might be pessimistic about the future, but as long as people get sick or injured they will need physicians, and the better the physicians the greater will be the demand for them. Let us not be overly alarmed. Go back to your counties, interest yourself in various health activities, help solve the problems. Changes and adjustments will no doubt have to be made in the future as they have in the past—but make them with the help of and through your medical organization, always keeping in mind the patient first, yourself after."

APPOINTMENT OF NEW COMMITTEES

As his first official act, President Hein announced the appointment of the following committee members, which appointments, on motion by Wm. M. Skipp, Youngstown, seconded by E. L. Jackson, Perrysville, and carried, were officially confirmed by the House of Delegates:

Committee on Public Relations and Economics—E. O. Swartz, Cincinnati, for a term of five years. To serve as chairman of the committee during 1938-39: Charles W. Stone, Cleveland.

Committee on Education—Clyde L. Cummer, Cleveland, for a term of five years and to serve chairman of the committee during 1938-39.

Committee on Scientific Work—Claude B. Norris, Youngstown, for a term of five years. To be chairman of the committee during 1938-39: Albert F. Kuhl, Dayton.

In compliance with the amendment to the By-Laws, adopted by the House of Delegates at its session on Wednesday, May 11, he appointed the following to serve on the newly created **Judicial and Professional Relations Committee**—Leslie L. Bigelow, Columbus, for a term of two years, and to serve as chairman of the committee during 1938-39; J. E. Tuckerman, Cleveland, for a term of five years; John A. Caldwell, Cincinnati, for a term of one year; G. A. Woodhouse, Pleasant Hill, for a term of four years; Jas. G. Kramer, Akron, for a term of three years.

There being no further business, the House of Delegates adjourned to meet in either Toledo or Cleveland in 1939.

Attest: CHARLES S. NELSON,
Executive Secretary.

House of Delegates Roll Call, 92nd Annual Meeting

County	Delegate	First Session	Second Session
Adams	Hazel L. Sproull	present	———
"	R. C. Wenrick	———	present
Allen	J. R. Tillotson	present	present
Ashland	E. L. Jackson	present	present
Ashtabula	R. B. Wynkoop	present	present
Athens	Wm. Hubert Hyde	———	———
Auglaize	Guy E. Noble	present	present
Belmont	R. H. McCommon	present	present
Brown	Geo. P. Tyler, Jr.	———	———
Butler	C. T. Atkinson	present	present
Carroll	Lewis W. Cellio	present	present
Champaign	D. C. Houser	present	present
Clark	G. M. Lane	present	present
Clermont	Jas. K. Ashburn	———	———
Clinton	Robert Conard	present	present
Columbiana	John A. Fraser	present	present
Coshocton	A. P. Magness	present	present
Crawford	C. A. Marquart	present	present
Cuyahoga	G. F. Sykes	present	present
"	I. H. Einsel	present	present
"	Claude D. Waltz	present	present
"	H. C. King	present	present
"	C. G. LaRocco	present	present
"	E. F. Kieger	present	present
"	R. K. Updegraff, Jr.	present	present
"	Milton B. Cohen	present	present
"	Harry L. Farmer	present	present
"	Charles E. Kinney	present	———
"	Farrell T. Gallagher	———	present
"	M. Paul Motto	present	present
Darke	C. I. Stephen	present	present
Defiance	D. J. Slosser	present	present
Delaware	James G. Parker	———	———
Erie	Ross M. Knoble	present	present
Fairfield	Ralph H. Smith	present	———
Fayette	James F. Wilson	present	present
Franklin	I. B. Harris	———	present
"	E. J. Emerick	present	present
"	L. L. Bigelow	present	present
"	John M. Thomas	present	present
"	J. M. Dunn	———	present
Fulton	R. W. Reynolds	———	———
Gallia	W. Lewis Brown	present	———
"	S. L. Bossard	———	present
Geauga	H. E. Shafer	present	present
Greene	H. C. Messenger	present	present
Guernsey	George F. Swan	present	present
Hamilton	Henry B. Freiberg	present	present
"	V. Bradley Roberts	present	———
"	Emil R. Swepston	present	present
"	Max M. Zinninger	present	present
"	Otto J. Seibert	present	present
"	John W. McCammon	———	present
"	E. O. Swartz	present	———
"	Irving H. Schroth	———	present
Hancock	J. V. Hartman	present	present
Hardin	R. G. Schutte	———	present
Harrison	E. L. Miller	———	———
Henry	J. J. Harrison	———	———
Highland	H. W. Chaney	present	present
Hocking	C. T. Grattidge	present	present
Holmes	Neven P. Stauffer	present	present
Huron	Geo. F. Linn	———	———
Jackson	J. S. Hunter	———	———
Jefferson	S. J. Podlewski	present	present
Knox	F. C. Anderson	present	present
Lake	V. N. Marsh	present	present
Lawrence	George G. Hunter	present	———
Licking	J. Fleek Miller	present	present
Logan	C. K. Startzman	present	present
Lorain	S. V. Burley	present	———
"	Chas. R. Meek	———	present
Lucas	A. A. Brindley	present	present
"	E. B. Gillette	present	present
"	John F. Wright	present	present
Madison	W. A. Holman	present	———
Mahoning	Walter K. Stewart	present	present
"	O. J. Walker	present	present
"	Gordon G. Nelson	present	present
Marion	H. K. Mouser	present	present
Medina	Morris Wilderom	present	———
Meigs	P. A. Jividen	present	present
Mercer	M. L. Downing	present	present
Miami	G. A. Woodhouse	present	present
Monroe	A. R. Burkhart	———	———
Montgomery	H. V. Dutrow	present	present
"	A. W. Carley	present	present
"	P. L. Yordy	present	———
Morgan	Edgar Northrup	present	present
Morrow	F. M. Hartsook	present	present
Muskingum	M. A. Loebell	present	present
Noble	———	———	———
Ottawa	A. S. Mack	present	present
Paulding	L. R. Fast	———	———
Perry	H. F. Minshull	———	present
Pickaway	C. G. Stewart	———	———
Pike	L. E. Wills	present	———
Portage	J. S. Deyell	———	———
Preble	———	———	———
Putnam	W. D. Hickey	present	present
Richland	John S. Hattery	present	present
Ross	O. P. Tatman	present	present
Sandusky	C. I. Kuntz	present	present
Scioto	Dow Allard	present	present
Seneca	R. R. Hendershott	present	present
Shelby	L. C. Pepper	present	present
Stark	V. Z. Garster	present	present
"	A. R. Basinger	present	present
"	G. F. Zinninger	present	present
Summit	C. R. Steinke	present	present
"	W. A. Hoyt	present	present
"	D. C. Brennan	———	present
"	D. B. Lowe	present	present
Trumbull	R. D. Herlinger	present	———
Tuscarawas	M. W. Everhard	present	present
Union	John Dean Boylan	present	present
Van Wert	J. R. Jarvis	present	present
Vinton	H. D. Chamberlain	———	———
Warren	N. A. Hamilton	present	present
Washington	C. C. Deamude	present	present
Wayne	R. C. Paul	present	present
Williams	H. W. Wertz	———	———
Wood	Earl D. Foltz	present	———
Wyandot	L. Walter Naus	present	———
"	J. Craig Bowman	———	present
OFFICERS			
President	John B. Alcorn	present	present
President-Elect	Barney J. Hein	present	present
Treasurer	James A. Beer	present	present
Past-President	E. M. Huston	present	present
COUNCILORS			
First District	Parke G. Smith	present	present
Second District	D. W. Hogue	present	present
Third District	O. P. Klotz	present	present
Fourth District	E. J. McCormick	present	present
Fifth District	Harry V. Paryzek	present	———
Sixth District	Wm. M. Skipp	present	present
Seventh District	C. W. Kirkland	present	present
Eighth District	E. R. Brush	present	present
Ninth District	I. P. Seiler	present	present
Tenth District	C. C. Sherburne	present	present
		110	106

Mid-Summer Eighth District Meeting at McConnelsville on June 23

Physicians of the Eighth Councilor District will be guests of Dr. Louis Mark and the Rocky Glen Sanatorium at McConnelsville, Thursday, June 23, for the annual mid-summer meeting of the district. Luncheon will be served at 12:00 o'clock, after which there will be a business meeting, extemporaneous addresses and entertainment. The scientific program will consist of a talk on "Educational Campaign against Syphilis in Columbus, Ohio," by Dr. Louis J. Roth, Columbus, assistant professor of urology, Ohio State University College of Medicine; and an address by Dr. George Grile, Cleveland, on "Clinical Aspects of Essential Hypertension and Recurrent Hyperthyroidism".

The New Councilors!

Pertinent Data About Dr. Schriver and Dr. McNamee Newly-Elected Members of The Council

THE *Journal* takes pleasure in introducing the two new members of The Council, elected at the Ninety-Second Annual Meeting in Columbus, May 11-12, to the membership.

They are: Dr. L. Howard Schriver, Cincinnati, First District, and Dr. Edgar P. McNamee, Cleveland, Fifth District.



L. Howard Schriver

Dr. Schriver, aged 49 years, is a graduate of the University of Cincinnati, College of Medicine, in 1910, and is at present assistant professor of clinical surgery at that college. Dr. Schriver saw active service during the World War and since that time has been engaged in the practice of general surgery in Cincinnati.

At present Dr. Schriver is a trustee of the Academy of Medicine of Cincinnati and Hamilton County. He is a past-president of the Academy and a former member of the Executive Board, having held several committee posts before serving as president and on the executive boards. For the past two years Dr. Schriver served on the important Committee on Public Relations and Economics of the Ohio State Medical Association. He also is a past-president of the Cincinnati Public Health Federation, and a fellow of the American Medical Association.



Edgar P. McNamee

Dr. McNamee, aged 48 years, specializes in roentgenology in Cleveland. He is a graduate of the University of Pennsylvania School of Medicine in 1913. During the World War he served as a first lieutenant in the Medical Corps,with 15 months active service overseas.

Dr. McNamee is a member of the Legislative Committee of the Cleveland Academy of Medicine and a former member of the Hospitals' and Dispensaries' Committee of the Academy. He is a member of the Radiological Society of North America, serving as counselor of Northern Ohio for that society; member of the American Roentgen Ray Society; fellow of the American College of Physicians and American College of Radiology. Dr. McNamee is a member of the staff of St. Alexis Hospital, Cleveland, being a former secretary of the staff and member of the hospital executive committee. He is a trustee of the Cleveland Medical Library Association and a fellow of the American Medical Association. He was a member of the special committee of the Ohio State Medical Association which conferred a year ago with the State Industrial Commission on X-ray problems.

Columbus Academy's Postgraduate Day Program to Be on June 2

The Columbus Academy of Medicine will present a Postgraduate Day at the Scioto Country Club, Columbus, Thursday, June 2. A golf tournament will be held in the morning beginning at 9:30 o'clock. Luncheon will be served from 12:30 to 1:30 P. M. Speakers at the afternoon session, beginning at 2:30, will be: Dr. Walter Alvarez, Rochester, Minn., "Some Fairly Common but Usually Unrecognized Causes of Abdominal Discomfort"; Dr. Roy D. McClure, Detroit, Mich., "Acute Pancreatitis"; Dr. Charles E. Galloway, Evanston, Ill., "The Prevention and Treatment of Puerperal Fever". The following addresses will be presented at the evening session, beginning at 7:30: "Constipation and Diarrhea", by Dr. Alvarez; "Modern Treatment of Burns" (with colored motion pictures), by Dr. McClure, and "Colored Photography of the Cervix and a Discussion of the Various Cervical Lesions", by Dr. Galloway. All Ohio physicians are cordially invited. **There is no registration fee.**

Sigma Xi Initiation and Election

The Western Reserve University Chapter of Sigma Xi held its annual meeting with initiation of new members Wednesday evening, May 11. After the dinner there was a lecture by Dr. O. L. Inman, Director of the C. F. Kettering Foundation on "Chlorophyll and Photosynthesis". Those initiated included Dr. Joseph Seifter, instructor in the School of Pharmacy; Dr. Walter Heymann, Dr. Paul Gyorgy, Dr. W. B. Wartman, and Dr. Theodore T. Zuck of the faculty of the School of Medicine. The following officers were installed: President, Dr. Torald Sollmann, dean of the School of Medicine; vice-president, Dr. Frank Hovorka, associate professor of chemistry; secretary, Dr. James Clarke Gray, assistant professor of biology; and treasurer, Dr. Leroy D. Edwards, assistant professor of pharmacognosy and pharmacology of the School of Pharmacy.

MEDICAL CARE SURVEY BLANKS DISTRIBUTED

Each Ohio Physician Should Fill Out Blank No. 1 As Soon As He Receives It From His County Medical Society

BY the time this issue of *The Journal* reaches all members, or shortly thereafter, blanks to be used by the county medical societies and academies of medicine of the Ohio State Medical Association in making local surveys as part of the nation-wide study of medical care being conducted by the American Medical Association will be in the hands of each county society secretary.

Acting on the instructions of The Council, the State Headquarters Office at Columbus has shipped supplies of blanks to each county society secretary. In some counties the secretary, no doubt, will take charge of the survey; in others the responsibility of guiding the study will be turned over to some energetic member or a special committee. Nevertheless, the blanks are being sent to the secretary to be relayed to the proper individual, or committee.

Every physician will receive a copy of Blank No. 1, probably the most important blank of the series of nine blanks. As soon as you receive Blank No. 1 fill it out as completely and as accurately as possible, using estimates if exact data is not available. After answering all questions asked on Blank No. 1, return it by mail or personally to the person or committee from whom you received it. The blank does not have to be signed. All blanks will be retained by the county medical society temporarily, as the second phase of the study requires summarizing and analyzing of the information obtained.

Procedure for distribution of the remaining blanks to the agencies and organizations from which data is being sought will be worked out by each county medical society through the appointment of a survey chairman or a special committee. All blanks should be retained by the county medical society for summarizing and analysis at a later date.

Blanks in estimated quantities have been sent to each county medical society. Additional blanks may be obtained from the State Headquarters Office. Special bulletins containing suggestions as to procedure and pertinent information will be issued from time to time from the Columbus office.

The all-important thing now is for each member to fill out Blank No. 1 as soon as he receives it and return it at once to the person or committee heading up the study for his county medical society. Before summaries and analyses can be made, data must be obtained. Therefore, it is vital that each physician give his prompt attention to furnishing the information sought by Blank No, 1.

Probably this is the most important project of this character ever undertaken by the medical profession. The profession dare not fall down on the job. Ohio with its well-organized societies in practically every county is in a position to take the lead in this undertaking if every member of the Ohio State Medical Association will do his part and each county medical society will make use of its potential facilities.

ALL ANNUAL MEETING ATTENDANCE RECORDS SHATTERED AT RECENT COLUMBUS SESSION; REGISTRATION DATA

ALL previous registration records were broken at the Ninety-Second Annual Meeting of the Ohio State Medical Association held at the Neil House, Columbus, May 11 and 12.

Total registration of physicians was 1414, including 1330 members of the State Association, 15 out-of-state physicians, 47 Ohio physicians and 22 interns who were guests. Medical students attending the meeting totaled 197. There were 104 technical exhibitors and 35 technicians, nurses and dentists. The number of women guests was 318, making the total registration 2068.

The following tabulations show the registration figures for the past 20 succeeding Annual Meetings and the number of members from each county who registered, compared to the number of members in the county on May 11. It will be noted that only two of the 87 county medical societies in the state were not represented.

Annual Meeting Registration For 1919-1938 Inclusive

Year	Place	Members	Out-of-State Physicians	Guests	Technical Exhibitors	Total
1919	Columbus	1173	10	264	92	1529
1920	Toledo	810	17	105	80	1062
1921	Columbus	1275	28	204	96	1503
1922	Cincinnati	1066	21	184	70	1341
1923	Dayton	1117	19	202	76	1414
1924	Cleveland	1301	13	180	109	1603
1925	Columbus	1204	17	361	107	1689
1926	Toledo	903	19	120	83	1125
1927	Columbus	1320	17	286	82	1705
1928	Cincinnati	916	27	92	80	1116
1929	Cleveland	1231	15	249	124	1619
1930	Columbus	1241	13	435	86	1775
1931	Toledo	826	13	198	50	1087
1932	Dayton	978	2	201	45	1226
1933	Akron	858	6	160	25	1049
1934	Columbus	1069	9	410	51	1539
1935	Cincinnati	973	17	197	84	1271
1936	Cleveland	1099	14	563	137	1813
1937	Dayton	1103	18	366	64	1551
1938	Columbus	1330	15	619	104	2068

Registration, 1938 Annual Meeting, By Counties and Membership Data

County	Membership May 11, 1938	No. of Members Registered at 1938 Annual Meeting
Adams	15	5
Allen	62	19
Ashland	25	3
Ashtabula	41	1
Athens	29	11
Auglaize	25	7
Belmont	56	7
Brown	6	—
Butler	84	14
Carroll	12	1
Champaign	22	9
Clark	73	27
Clermont	23	1
Clinton	23	7
Columbiana	59	7
Coshocton	20	8
Crawford	30	14
Cuyahoga	1024	96
Darke	32	6
Defiance	20	1
Delaware	23	9
Erie	38	6
Fairfield	33	15
Fayette	16	5
Franklin	446	285
Fulton	18	3
Gallia	20	5
Geauga	10	1
Greene	35	18
Guernsey	28	7
Hamilton	713	80
Hancock	41	7
Hardin	26	8
Harrison	14	2
Henry	14	2
Highland	24	12
Hocking	14	3
Holmes	9	3
Huron	19	3
Jackson	16	9
Jefferson	59	4
Knox	27	14
Lake	23	1
Lawrence	24	6
Licking	54	28
Logan	25	8
Lorain	95	14
Lucas	278	56
Madison	14	7
Mahoning	205	34
Marion	45	19
Medina	28	6
Meigs	12	3
Mercer	19	2
Miami	52	24
Monroe	6	3
Montgomery	278	94
Morgan	10	2
Morrow	9	3
Muskingum	53	22
Ottawa	17	5
Paulding	14	—
Perry	19	10
Pickaway	15	10
Pike	8	6
Portage	26	1
Preble	15	1
Putnam	25	5
Richland	64	10
Ross	42	19
Sandusky	36	8
Scioto	71	15
Seneca	38	9
Shelby	20	4
Stark	201	32
Summit	305	37
Trumbull	56	7
Tuscarawas	52	16
Union	16	10
Van Wert	20	4
Vinton	3	2
Warren	7	4
Washington	33	10
Wayne	41	11
Williams	16	1
Wood	35	11
Wyandot	8	5
Totals	5769	1330

Names of Members Registered

The list of members registered by counties follows:

Adams—J. M. Brooke, S. J. Ellison, Hazel Sproull, O. T. Sproull, R. C. Wenrick **Allen**—Ezra Burnett, O. E. Harvey, E. H. Hedges, J. R. Johnson, Rollo B. Krouse, Charles H. Leech, Walter A. Noble, W. V. Parent, Geo. J. Roberts, O. S. Roebuck, Chas. Smith, David L. Steiner, O. S. Steiner, H. A. Thomas, L. C. Thomas, T. R. Thomas, B. F. Thutt, J. R. Tillotson, H. C. Weisenbarger. **Ashland**—P. E. Decatur, Elmer L. Jackson, Harry T. Martin. **Ashtabula**—R. B. Wynkoop. **Athens**—A. K. Buell, George N. Burger, C. H. Creed, A. W. Guest, John C. Henry, W. E. Howe, R. S. Moynan, John T. Sprague, W. V. Sprague, E. I. Stanley, J. L. Webb. **Auglaize**—Chas. C. Berlin, Carl W. Ekermeyer, E. F. Heffner, R. C. Hunter, Guy E. Noble, Harry S. Noble, J. H. Schaeffer.

Belmont—C. W. Kirkland, Lewis L. Liggett, Robert H. McCommon, H. M. Metcalf, G. L. Ramsey, Homer S. West, R. H. Wilson. **Butler**—C. T. Atkinson, Donald M. Blizzard, Harry L. Burdsall, Geo. Flenner, Mildred White Gardiner, David F. Gerber, Wilmer E. Griffith, William H. Henry, Ross A. Hill, H. M. Lowell, E. McCall Morris, W. H. Roehll, H. H. Smith, H. N. Ward. **Carroll**—Lewis Cellio. **Champaign**—Robert V. Anderson, E. D. Buhrer, Francis R. Grogan, D. C. Houser, Lewis Inskeep, F. E. Lowry, J. W. Norman, W. H. Sharp, C. E. Thompson.

Clark—F. P. Anzinger, J. E. Burgman, A. W. Detrick, Harold B. Elliott, C. W. Evans, C. E. M. Finney, Samuel E. Flook, A. A. Gavey, J. R. Gersack, E. P. Greenawalt, Frank A. Halloran, E. R. Hargett, F. A. Hartley, Roger C. Henderson, D. W. Hogue, A. K. Howell, C. L. Jones, T. Victor Kolb, G. M. Lane, J. A. Link, Louis H. Mendelson, Edw. C. Nehls, Wm. B. Quinn, Carl H. Reuter, Benetta D. Titlow, Will Ultes, G. D. Whitacre. **Clermont**—Allan B. Rapp. **Clinton**—Robert Conard, Thomas E. Craig, Glenn K. Dennis, J. F. Fisher, Kelley Hale, C. E. Kinzel, William L. Weed. **Columbiana**—J. S. Atchison, John A. Fraser, Milton M. Gottlieb, James C. Gruber, M. D. McCutcheon, W. G. McDade, Edward W. Miskall. **Coshocton**—J. C. Briner, S. D. Cohen, F. W. Craig, R. E. Hopkins, J. D. Lower, A. P. Magness, J. G. Smailes, E. M. Wright. **Crawford**—C. Adams, K. H. Barth, Darrel D. Bibler, R. J. Caton, Charles J. Griebling, Mart L. Helfrich, O. R. Kackley, John M. Kidd, C. A. Lingenfelter, C. A. Marquart, P. A. Murr, Robert L. Solt, G. T. Wasson, Wm. Lewis Yeomans.

Cleveland and Cuyahoga County—John B. Anderson, Elmore R. Bailey, G. I. Bauman, Claude S. Beck, R. P. Bell, Alwyn E. Bennett, A. C. J. Brickel, A. S. Broglio, Alexander T. Bunts, Simon Bunin, H. Van Y. Caldwell, C. D. Christie, Milton B. Cohen, Henry A. Crawford, George Crile, Jr., Clyde L. Cummer, Howard Dittrick, Fred W. Dixon, V. H. Dredge, I. H. Einsel, Charles W. Emmons, Harry L. Farmer, Warren C. Fargo, Joseph Fetterman, J. Edgar Fisher, Ida E. Fleming, Farrell T. Gallagher, W. James Gardner, Wm. P. Garver, Frank S. Gibson, C. Lee Graber, Jos. H. Grossman, John E. Hannibal, I. M. Hinnant, W. J. Irwin, C. R. Jablonoski, Theron S. Jackson, Albert L. Jones, Thomas E. Jones, F. T. Kopfstein, M. R. Kellum, J. B. Klein.

E. F. Kieger, Hubert C. King, C. E. Kinney, Bernard B. Larsen, C. G. LaRocco, Max Laven, F. A. LeFevre, Carl H. Lenhart, Geo. H. Lewis, McKinley London, Morris M. Malmud, J. J. Marek, E. A. Marshall, John R. McDowell, Myron Metzenbaum, Theodore Miller, M. Paul Motto, F. S. Mowry, E. W. Netherton, Clayton C. Perry, Harry V. Paryzek, E. A. Peterson, John E. Rauschkolb, Faith W. Reed, J. L. Reycraft, Edwin D. Richards, Harry C. Rosenberger, Joseph M. Rossen, Geo. L. Sackett, Irving Schonberg, R. W. Scott, O. M. Shirey, Alvin O. Sibila, H. S. Sloan, Joseph T. Smith, W. A. Sommerfield, L. M. Starin, David Steel, Richard E. Stout, Geo. F. Sykes, Howard P. Taylor, Stanley E. Turel, John A. Toomey, J. E. Tuckerman, Ralph Updegraff, Jr., Claude D. Waltz, Clarence M. Weidenthal, Myron A. Weitz, Guy H. Williams, Guy H. Williams, Jr., Z. T. Wirtschafter, Edward E. Woldman, Walter J. Zeiter, N. L. Zinner.

Darke—W. D. Bishop, J. E. Gillette, I. H. Hawes, Paul G. Lenhert, Gilbert E. Sayle, C. I. Stephen. **Defiance**—D. J. Slosser. **Delaware**—Geo. T. Blydenburgh, O. W. Bonner, W. E. Borden, A. R. Callander, M. S. Cherington, M. W. Davies, Harold W. Davis, J. G. Parker, F. M. Stratton. **Erie**—V. A. Killoran, Ross M. Knoble, E. J. Meckstroth, H. L. Sowash, Paul N. Squire, H. D. Waltz. **Fairfield**—H. C. Ashton, H. M. Amstutz, Geo. O. Beery, Carl W. Brown, A. A. Brown, W. R. Coleman, A. V. Lerch, M. E. Nichols, E. B. Roller, R. H. Smith, C. P. Swett, Kenneth W. Taylor, W. B. Taylor, J. W. Whittus, W. E. Wiyiarch. **Fayette**—James M. Harsha, W. D. Maag, A. S. Stemler, James F. Wilson, Orlyn Wiseman.

Columbus and Franklin County—B. W. Abramson, Marion L. Ainsworth, N. A. Albanese, John B. Alcorn, J. Garfield Alcorn, D. J. Alspaugh, E. Stanley Anderson, A. A. Ahn, W. B. Andrus, K. H. Armen, Shirley Armstrong, Frank P. Atkinson, H. M. Austin, Hugh A. Baldwin, J. F. Bateman, Paul R. Bauman, E. H. Baxter, H. C. A. Beach, E. C. Beam, H. G. Beatty, James A. Beer, Louis C. Benkert, C. H. Benson, L. L. Bigelow, E. T. Bonar, G. H. Bonnell, R. W. Bonnell, Chas. F. Bowen, Donald F. Bowers, H. E. Boucher, H. O. Bratton, Wayne Brehm, John Edwin Brown, Ray Brown, Isabel A. Bradley, J. W. Brobst, John Earl Briggs, Burton F. Barney, Alice M. Bustin, Aaron S. Canowitz, J. J. Carter, E. H. Chapin, P. H. Charlton, I. G. Clark, E. F. Clouse, Kenneth A. Clouse, H. M. Clodfelter, O. L. Coddington, D. W. Collison, C. W. Conley, Geo. Cooperrider, André Crotti, J. H. Czatt.

Drew L. Davies, Deane D. Davis, Wm. C. Davis, Horace B. Davidson, R. W. DeCrow, C. J. DeLor, M. T. Dixon, C. A. Doan, Verne A. Dodd, R. Frank Donley, H. L. Donohoe, H. H. Dorr, J. D. Dunham, A. Henry Dunn, Joseph M. Dunn, N. C. Dysart, H. D. Emsweiler, S. D. Edelman, E. J. Emerick, Earl W. Euans, J. P. Farson, R. S. Fidler, T. R. Fletcher, Fred Fletcher, Huston F. Fulton, Hubert H. Fockler, James M. Foley, Jonathan Forman, Chas. F. Frosh, Albert D. Frost, Clarence Fry, Frank T. Gallen, J. M. Gettrost, H. D. Giles, David B. Gilliam, H. M. Gilmore, F. E. Ginder, S. J. Goldstein, M. L. Goodman, Emilie C. Gorrell, E. J. Gordon, F. W. Gosnell, Mary Ann Graber, M. Hajos, Augustus A. Hall, F. E. Hall, James J. Hamill, Walter H. Hamilton, F. C. Haney, Robert J. Hansel, Frank W. Harrah, George T. Harding, E. W. Harris, I. B. Harris, L. M. Harris, P. L. Harris, Arthur M. Hauer, J. M. Hays, Emery R. Hayhurst, Geo. J. Heer, Arthur G. Helmick, Carroll E. Herron, Warren W. Hicks, A. T. Hopwood, S. M. Horen, E. G. Horton, George O. Hoskins, Carl DaCosta Hoy, F. C. Hugenberger, J. J.

Hughes, Carl A. Hyer, W. D. Inglis, Chas. L. Ireland.

L. N. Jentgen, Walter A. Jaquith, Harry J. Jefferson, David M. Johnson, Carl S. Junkermann, A. H. Kanter, Max P. Kanter, M. A. Krakoff, G. W. Keil, F. L. Keiser, J. E. Kerschner, R. A. Kidd, Jr., E. E. Kimmel, C. C. Kirk, Gilman D. Kirk, Robert C. Kirk, P. T. Knies, Herman W. Koerper, Robert W. Kropp, E. T. Kuhn, Cornelius C. Landen, A. B. Landrum, R. B. Lawyer, H. E. LeFever, N. E. Lenahan, Tom F. Lewis, W. E. Lloyd, E. C. Ludwig, F. E. Mahla, H. S. Manuel, George T. Mathews, Louis Mark, Olin R. Martin, W. Eugene Masters, C. S. McCafferty, Jas. A. McClure, A. B. McConagha, Sidney McCurdy, Charles A. McDonald, Richard L. McFarland, John W. Means, Russel G. Means, Nicholas Michael, Myron D. Miller, W. H. Miller, W. F. Millhon, M. E. Millhon, H. A. Minthorne, H. R. Mitchell, Wm. F. Mitchell, Dan Morse, Carl V. Moore, Dickson L. Moore, W. B. Morrison, Robert D. Myers, Link M. Murphy, Harry E. Myers, G. B. Nessley, Robin C. Obetz, W. E. Obetz, A. W. Oelgoetz, Edith Offerman, M. F. Osborn, Dwight M. Palmer, Paul W. Palmer, John W. Parker, Chas. W. Pavey, A. A. Peasley, E. F. Peinert, Claude S. Perry, H. M. Platter, R. G. Plummer, Beatrice Postle, C. D. Postle, L. L. Praver, Daniel J. Price, Joseph Price, D. E. Putnam.

R. E. Ramey, R. A. Ramsey, Thomas E. Rardin, M. E. Reeder, Philip J. Reel, H. L. Reinhart, W. S. Rhodes, J. A. Riebel, Rush Robinson, Wm. H. B. Roche, R. A. Rogers, A. Sophie Rogers, L. W. Rohr, Sam Rosenfeld, Jr., Thomas F. Ross, Pauline Rossel, Geneva Shong Rothemund, Robt. R. Rudolph, Anthony Ruppersberg, Jr., Maurice B. Rusoff, Ruth H. St. John, Thos. D. Santurello, Harry E. Secrest, R. J. Secrest, A. H. Sealy, C. E. Silbernagel, Clark E. Sharp, Charles J. Shepard, C. M. Shepard, C. C. Sherburne, E. R. Shilling, A. J. Shoemaker, Wynne M. Silbernagel, George P. Sims, Clayton S. Smith, Kenneth D. Smith, Wm. P. Smith, C. H. Solomonides, J. C. Sommer, C. L. Spohr, F. M. Stanton, J. A. Stout, E. J. Stedem, M. F. Steele, J. S. Stevens, A. R. Stone, Wm. A. Stoutenborough, Ralph B. Taylor, A. W. Thomas, Francis W. Thomas, John M. Thomas, J. A. Thone, E. A. Thrall, E. W. Troutman, M. H. Turton, Finley Van Orsdall, C. M. Valentine, L. H. VanBuskirk, Thomas A. Vogel, Richard H. Wallace, H. W. Ward, Frank Warner, James H. Warren, Frank W. Watson, Fred H. Weber, M. Grace Welch, J. O. Welch, C. H. Wells, Dan J. Whitacre, Harry O. Whitaker, H. Whitehead, J. W. Wilce, Judson D. Wilson, Joseph C. Williamson, Charlotte Winnemore, H. P. Worstell, C. H. Wyker, Donald E. Yochem, Lorne W. Yule, Robert E. S. Young, Luke V. Zartman.

Fulton—Wm. H. Maddox, Geo. McGuffin, T. F. Smyth. **Gallia**—S. L. Bossard, W. Lewis Brown, G. A. Mack, N. A. Martin, O. A. Vornholt. **Geauga**—H. E. Shafer. **Greene**—Ernest Ekemeyer, Paul D. Espey, W. M. Hartinger, D. F. Kyle, W. C. Marshall, Ben R. McClellan, Reyburn McClellan, C. G. McPherson, H. C. Messenger, T. F. Myler, Harold E. Ray, A. D. Ritenour, Hugh C. Schick, David Taylor, L. L. Taylor, A. N. Vandeman, T. H. Winans, P. B. Wingfield. **Guernsey**—C. A. Craig, C. C. Headley, O. R. Jones, Fred W. Lane, Gordon Lawyer, B. A. Souders, George F. Swan.

Cincinnati and Hamilton County—E. A. Baber, Albert J. Bell, Julien E. Benjamin, M. A. Blankenhorn, Joseph Bolin, F. J. Boyd, John A. Caldwell, A. Gerson Carmel, Robert Carothers, A. H. Carr, Daniel J. Davies, Giles DeCourcy, Leonard M. Dub, Edwin W. Enz, Joseph P. Evans, Carroll J. Fairo, W. B. Fessenden, Henry B. Freiberg, Mabel E. Gardner, R. E. Gaston, Douglas Goldman, Henry M. Goodyear, Lawrence C. Goldberg, George M. Guest, F. K. Harder, Louis J. Hendricks, Louis G. Herrmann, Benjamin Hoyer, Samuel Iglauer, D. A. Johnston, Lee Keidel, Arthur G. King, Edward King, Harry Landt, J. Arthur Leary, Louis A. Lurie, George Lyford, J. W. McCammon, J. V. McGowan, George H. Musekamp, Chas. A. Neal, E. H. Niesen, A. C. Renz, V. Bradley Roberts, Wm. H. Rohdenburg, Irving H. Schroth, Leon Schiff, E. H. Schoenling, Otto Seibert, I. C. Sharon, Parke G. Smith, Louis Sommer, R. N. Speckman, Henry A. Springer, Bernard A. Safer, Henry Stanbery, Francis Marion Stephens, Thos. M. Stewart, C. J. Straehley, Cecil Striker, Max Strikman, Ernest O. Swartz, Emil R. Swepston, H. F. Tangeman, Elmore B. Tauber, E. R. Torrence, D. A. Tucker, Jr., F. W. Vockell, M. Wallenstein, Elmer Werner, Abbott Y. Wilcox, Jr., H. M. Wiley, John H. Wilms, J. J. Winn, Jerome Zeigler, Mendel Zeligs, Meyer A. Zeligs, Samuel Zielonka, M. M. Zinninger, Albert R. Zoss.

Hancock—H. O. Crosby, H. E. Fruth, M. Hanna, John V. Hartman, D. J. King, O. P. Klotz, B. F. Mowry. **Hardin**—Floyd M. Elliott, H. E. Gibson, C. L. Johnson, R. C. McNeill, G. F. Moench, L. C. Neiswander, E. S. Protzman, R. G. Schutte. **Harrison**—G. W. Brugler, R. P. Rusk. **Henry**—B. L. Johnson, G. M. Wright. **Highland**—W. H. Ambrose, J. C. Bohl, H. W. Chaney, C. C. Cropper, Walter Felson, Clifford G. Foor, J. H. Frame, J. B. Glenn, J. C. Larkin, W. B. Roads, C. H. Skeen, K. R. Teachnor. **Hocking**—J. S. Cherrington, C. T. Grattidge, W. B. Lacock. **Holmes**—J. C. Elder, Luther W. High, N. P. Stauffer. **Huron**—L. H. Hayhurst, J. A. Sipher, J. C. Steiner. **Jackson**—B. J. Allison, C. C. Fitzpatrick, H. W. Gillen, J. S. Hunter, W. J. Kirby, J. J. McClung, W. R. Riddell, W. B. Taylor, Marlin R. Wedemeyer. **Jefferson**—Ben L. Casey, Samuel L. Greenburg, S. J. Podlewski, Albert E. Weinstein.

Knox—F. C. Anderson, Charles S. Baldwin, John C. Drake, Robert L. Eastman, S. O. Gantt, C. L. Harmer, R. H. Hoecker, George B. Imhoff, James F. Lee, S. N. Lord, Gordon H. Pumphrey, J. M. Pumphrey, O. W. Rapp, Julius Shamansky. **Lake**—Van N. Marsh. **Lawrence**—Cosper Burton, George G. Hunter, Anne D. Marting W. F. Marting, Vincent V. Smith, F. R. Stewart. **Licking**—H. B. Anderson, W. Allen Avery, C. G. Bozman, George N. Brown, Harry M. Butler, Geraldine H. Crocker, J. N. Cross, A. G. Crow, Homer J. Davis, Carl J. Dillon, R. G. Downs, Carl E. Evans, G. A. Gressle, Paul C. Grove, W. E. Hopkins, James B. Johnson, Jr., E. H. Johnston, R. C. Mauger, J. Fleek Miller, Thos. E. Morgan, James K. Nealon, W. B Nye, Ralph E. Pickett, M. S. Rarick, Dale E. Roth, Geo. W. Sapp, Donald R. Sperry, Arthur J. Tronstein. **Logan**—O. C. Amstutz, C. L. Barrett, J. P. Harbert, A. E. Jones, F. B. Kaylor, A. J. McCracken, C. K. Startzman, F. Blair Webster. **Lorain**—Valloyd Adair, S. V. Burley, Benj. Carlson, C. H. Frederick, Leonard H. Harris, V. C. Hart, W. B. Hubbell, Albert J. Kirchner, A. S. McKitrick, Chas. R. Meek, A. C. Siddall, R. A. Stack, David Thomas, L. H. Trufant.

Toledo and Lucas County—R. L. Bidwell, R. E. Boice, A. A. Brindley, P. Bruce Brockway, B. G. Chollett, Frank C. Clifford, I. R Cohn, Fred M. Douglass, R. A. Diethelm, Martin W. Diethelm, B. S. Dunham, Fred L. Eyestone, Karl D. Figley, O. O. Fordyce, Stanley D. Giffen, E. B. Gillette,

Norris W. Gillette, E. F. Glowczewski, A. P. Hancuff, Walter H. Hartung, Thomas, Heatley, B. J. Hein, C. E. Hufford, N. W. Kaiser, Philip Katz, I. H. Kass, B. A. Karwowski, Raymond C. King, Rollin Kuebbeler, Charles Lukens, John A. Lukens, Donald C. Mebane, Edward J. McCormick, C. L. McKibben, Richard A. Mills, Norman B. Muhme, John T. Murphy, F. N. Nagel, W. A. Neill, Leonard Nippe, Frederick P. Osgood, H. G. Pamment, H. J. Parkhurst, S. R. Salzman, B. G. Shaffer, H. E. Smead, Lewis F. Smead, Bernhard Steinberg, W. C. Suter, Reynold A. Tank, C. W. Waggoner, E. F. Ward, Morris Weinblatt, P. D. Werum, J. F. Wright, Theo. Zbinden.

Madison—W. A. Holman, R. W. E. Irwin, J. M. Morse, Robert S. Postle, F. E. Rosnagle, G. C. Scheetz, R. H. Trimble. **Mahoning**—W. K. Allsop, C. H. Beight, Morris H. Belinky, Wendell H. Bennett, L. Geo. Coe, W. D. Collier, Alice W. Elliott, Armin Elsaesser, James L. Fisher, H. P. McGregor, J. N. McCann, H. E. McClenahan, A. W. Miglets, J. F. Nagle, Gordon G. Nelson, Dean Nesbit, John Noll, Jr., Claude B. Norris, Robert E. Odom, E. J. Reilly, W. W. Ryall, Samuel H. Sedwitz, A. B. Sherk, Wm. M. Skipp, Ivan C. Smith, Myron H. Steinberg, W. K. Stewart, Walter J. Tims, J. C. Vance, C. C. Wales, O. J. Walker, Wm. A. Welsh, E. J. Wenaas, Earl H. Young. **Marion**—M. F. Axthelm, E. L. Brady, D. W. Brickley, D. W. Brickley, Jr., Maud L. Bull, Bret B. Hurd, S. W. Mattox, R. T. Morgan, H. K. Mouser, B. D. Osborn, Robert Ramroth, L. L. Roebuck, Carl W. Sawyer, Warren C. Sawyer, N. Sifritt, Jack F. Smyth, A. A. Starner, T. H. Sutherland, B. H. Taylor.

Medina—Maurice C. Archer, E. L. Crum, R. G. Johnston, F. W. Knittel, Rudolph A. Styblo, Morris Wilderom. **Meigs**—Byron Bing, P. A. Jividen, C. A. Poindexter. **Mercer**—M. L. Downing, John T. Gibbons. **Miami**—A. J. Bausman, John F. Beachler, J. Robert Caywood, Don F. Deeter, H. S. Elliott, J. G. Freshour, Burton M. Hogle, John J. Kearney, H. W. Kendell, Kenneth F. Lowry, E. T. Pearson, C. F. Puterbaugh, E. G. Puterbaugh, John T. Quirk, L. A. Ruhl, R. D. Spencer, W. W. Trostel, L. D. Trowbridge, R. H. Wehr, William W. Weis, Hugh Wellmeier, G. A. Woodhouse, E. A. Yates, Ralph D. Yates. **Monroe**—W. P. Johnson, D. W. Lowe, James C. Pugh.

Dayton and Montgomery County—Sterling H. Ashmun, Robert C. Austin, J. O. Beavis, Roy S. Binkley, C. C. Borden, A. T. Bowers, Edgar L. Braunlin, Warren C. Breidenbach, A. B. Brower, Herbert L. Brumbaugh, Wm. B. Bryant, C. E. Burgett, H W. Burnett, A. W. Carley. W. G. Clagett, C. E. Clark, M. W. Coleman. A. D. Cook, Lloyd H. Cox, A. M. Culler, T. H. Dickinson, R. C. Doan, F. J. Driscoll, H V. Dutrow, Gordon L. Erbaugh, A. G. Farmer, Gertrude Felker, C. D. Fife, Robert H. Firth, E. C. Fischbein, J. D. Fouts. G. C. Gilfillen, Geo. D Gohn, O. M. Graham, Walter K. Gregg, D. James Greiner, Gerald C. Grout, Richard L. Haas, M. R. Haley, H. C. Hanning, Wm. H. Hanning, K. W. Horn, C. B. Horton, E. M. Huston, John W. Irwin, Mildred E. Jeffrey, Lynn M. Jones, J. S. Koehler, Harold F. Koppe, Albert F. Kuhl.

Raymond A. Lewis, Elmer C. Loomis, R. C. Markey, S. N. Maimon, J. Grant Marthens, A. W. McCally, M. B. Menke, J. W. Millette, Richard C. Miller, T. E. Newell, P. H. O'Hara, Benedict Olch, J. Milton Owen, H. H. Pansing, F. C. Payne, E. F. Pfanner, Maitland D. Place, R. E. Pumphrey, Jos. H. Prince, Wallace E. Prugh, Merrill D. Prugh, George J. Rau, Wilbur A. Ricketts, R. C. Schneble, L. Everett Seyler, Mack M. Shafer, E. W. Shank, Paul J. Shank, C. D. Smith, C. Sidney Smith, E. W. Smith, C. D. Slagle, H. R. Stockwell, Clarke Sullivan, W. B. Taggart, C. Hugh Tate, R. E. Tyvand, Walter W. Webb, H. H. Williams, Sherl J. Winter, Giles Wolverton, Orville M. Wright, G. W. Yauger, Paul L. Yordy.

Morgan—Edgar Northrup, E. Galen Rex. **Morrow**—Frank M. Hartsook, R. L. Pierce, Frank H. Sweeney. **Muskingum**—J. Herbert Bain, Edmund R. Brush, S. P. Carter, W. D. Coffman, Walter L. Cruise, I. W. Curtis, O. I. Dusthimer, Philip H. Elliott, Beatrice T. Hagen, Lester Lasky, M. A. Loebell, George C. Malley, Robert S. Martin, J. R. McDaniel, N. M. Newport, Margaret O'Neal, A. C. Ormond, F. W. Phillips, C. F. Sisk, G. B. Trout, Chas. S. Turville, Earl B. Zurbrugg. **Ottawa**—Harry O. Beeman, Alexander S. Mack, F. E. Miller, Cyrus R. Wood, C. J. Wood. **Perry**—F. J. Crosbie, Harry L. Hite, O. J. Letherman, C. B. McDougal, James Miler, R. W. Miller, H. F. Minshull, W. D. Porterfield, Stanley Runk, Fred E. Spangler.

Pickaway—Arthur D. Blackburn, D. V. Courtright, G. R. Gardner, Geo. W. Heffner, R. S. Hosler, H. D. Jackson, Howard Jones, Lloyd Jonnes, V. D. Kerns, E. L. Montgomery. **Pike**—R. M. Andre, Robert T. Leever, W. L. McCaleb, Mack E. Moore, I. P. Seiler, L. E. Wills. **Portage**—S. U. Sivon. **Preble**—Chas. E. Mumma. **Putnam**—W. D. Hickey, H. A. Neiswander, L. M. Piatt, B. E. Watterson, J. D. Watterson. **Richland**—Leopold Adams, C. H. Bell, J. S. Hattery, L. C. Nigh, Charles L. Shafer, S. C. Schiller, J. L. Stevens, Hugh C. Winbigler, Ralph C. Wise, J. A. Yoder. **Ross**—Edwin H. Artman, R. E. Bower, Walter C. Breth, H. R. Brown, Geo. W. Cooper, Theodore Cutright, E. D. Engelman, L. T. Franklin, John W. Franklin, H. E. Harman, Ralph W. Holmes, L. E. Hoyt, A. E. Merkle, Geo. S. Mytinger, Glen Nisley, David A. Perrin, M. D. Scholl, Warde B. Smith, O. P. Tatman.

Sandusky—Edwin B. Banister, J. L. Curtin, C. L. Fox, C. A. Kingman, C. I. Kuntz, D. W. Philo, H. K. Shumaker, Chas. J. Wehr. **Scioto**—Dow Allard, D. A. Berndt, C. L. Ferguson, A. P. Hunt, H. M. Keil, Milton Levine, W. C. McCann, Gilbert Micklethwaite, H. H. Morris, W. A. Quinn, Harry F. Rapp, Joseph S. Rardin, Wm. E. Scaggs, Oral D. Tatje, A. L. Test. **Seneca**—Robert C. Chamberlain, Lawton C. Gerlinger, R. R. Hendershott, Edmund F. Ley, V. L. Magers, R. F. Machamer, D. J. Mulholland, E. H. Porter, Elsworth Sheldon. **Shelby**—F. R. McVay, L. C. Pepper, Lee V. Weis, S. C. Yinger. **Stark**—Edward Arnold, A. R. Basinger, H. H. Bowman, J. R. Brandon, L. A. Buchman, J. R. Caldwell, J. M. Donahue, D. T. Feiman, Edw. M. Feiman, R. Winter Frankmann, Verl Z. Garster, Paul E. Gilmor, I. B. Hamilton, Frank E Hart, F. M. Krichbaum, Abe A. Lichtblau, W. B. Malloy, W. C. Manchester, A. W. McConkey, W. A. McConkey, J. E. McNally, Howard S. Myers, A. R. Olmstead, C. A. Portz, Ralph K. Ramsayer, M. E. Scott, Wylie Scott, C. A. Walker, Geo. N. Wenger, Geo. M. Wilcoxon, Geo. F. Zinninger, Pauline Zinninger.

Summit—O. P. Allen, James G. Blower, John J. Bowlen, Daniel C. Brennan, C. J. Case, O. J. Chaney, Harry S. Davidson, Arthur Dobkin, R. A. Gregg, Walter A. Hoyt, D. C. Keller, J. G. Kramer, J. G. Lemmon, H. G. Long, Don B. Lowe, R. H Markwith, D. F. Mathias, Samuel E. McMaster, Frank T. Moore, Carl C. Nohe, G. A. Palmer, E. C. Pickard, F. C Potter, F. M. Rankin, Fowler B. Roberts, A. S. Robinson, M. R.

Schwartz, John R. Shoemaker, Jay D. Smith, J. E. Springer, Carl R. Steinke, Dean Tipton, A. D. Traul, Joseph M. Ulrich, Edw. L. Voke, A. M. Weil, C. F. Wharton. **Trumbull**—D. A. Gross, R. D. Herlinger, W. A. Lindsay, D. R. Mathie, A. H. Seiple, Henry T. Stiles, James J. Tyler. **Tuscarawas**—Paul J. Alspaugh, B. O. Burkey, Jay W. Calhoon, W. W. H. Curtiss, Clark M. Dougherty, M. W. Everhard, R. J. Foster, Roy D. Hildebrand, William E. Hudson, Geo. B. Kistler, John B. Kistler, B. A. Marquand, S. T. Marshall, Mary Elizabeth Rowlands, K. E. Shaweker, D. W. Shumaker.

Union—John Dean Boylan, Fred Callaway, E. S. Holmes, K. W. Keever, P. D. Longbrake, R. H. Martin, Angus MacIvor, James M. Snider, H. G. Southard, H. E. Stricker. **Van Wert**—S. A. Edwards, James R. Jarvis, J. B. Sampsell, H. E. Wilkinson. **Vinton**—A. A. Boal, H. D. Chamberlain. **Warren**—Edward Blair, C. Haarlammert, N. A. Hamilton, Leonard Mounts. **Washington**—Charles C. Deamude, F. E. Eddy, S. E. Edwards, G. E. Huston, R. M. Meredith, M. S. Muskat, W. E. Radcliff, W. W. Sauer, A. Howard Smith, J. F. Weber. **Wayne**—Lyman A. Adair, William V. Banning, Ward Frittz, M. N. Fowler, Bernard M. Foster, F. C. Ganyard, John J. Kinney, W. F. Mitchell, R. C. Paul, L. M. Snively, John J. Sutter. **Williams**—R. K. Ameter. **Wood**—Frank V. Boyle, E. D. Foltz, S. E. Gates, F. D. Halleck, Paul F. Orr, Elmer A. Powell, H. J. Powell, F. T. Sterling, John J. Stitt, H. E. Ward, Thomas W. Watson. **Wyandot**—J. Craig Bowman, R. L. Garster, B. A. Moloney, L. Walter Naus, C. B. Schoolfield.

Summer Golf Matches Planned By Physicians in Sixth District

Physicians in the Sixth Councilor District have planned a series of monthly golf meetings during this summer, to be held on the last Wednesday in June, July, August and September.

Each session will consist of golf matches in the afternoon and dinner in the evening, one fee to cover all expenses. While the objective of the meetings is to promote good fellowship among the physicians in the district, an effort will be made to determine the team championship of the counties and individual championship of the district.

Dates of the tournament are: June 29, Akron; July 27, Wooster; August 31, Youngstown; September 28, Canton.

Dr. G. D. Underwood, Navarre; Dr. A. C. Smith, Wooster, and Dr. D. C. Brennan, Akron, comprise the golf committee of the Sixth Councilor District. They will be glad to furnish additional information concerning the tournament.

Finance Study of Heart Failure

The Commonwealth Fund has made a three-year grant to Western Reserve University School of Medicine, Cleveland, for the study of the mechanism of heart failure, to be expended through Dr. Joseph T. Wearn, professor of medicine.

Legislature in Special Session Again, Battling With Relief Problems

Pursuant to a call from the Governor, the Ninety-Second Ohio General Assembly convened in Third Special Session at Columbus, Monday, May 16, for the purpose of providing funds for poor relief. Bills introduced during the week included provisions for extension of present utility, beer, admissions and malt taxes through 1940; permitting counties needing relief funds to issue bonds by a majority vote; additional tax of 30 cents per gallon on wine imported into the State; increase in the utilities tax for 1929 to 1942 from 65/100 of one per cent to one per cent, with funds allocated back to local governments for poor relief; permitting municipalities to levy for poor relief purposes, in addition to any and all other taxes, an excise tax upon any subject on which the Legislature has or would have authority to impose; a state income tax with graduated rates of two per cent of net income not exceeding $3,000 up to nine per cent of net income over $8,000; increase in the intangible property tax; proposing to amend the constitution to permit lotteries and sale of lottery tickets to provide funds to be used exclusively for relief purposes; levying a tax on bookmaking and legalizing the business of bookmaking and wagering to provide additional funds for poor relief; levying license taxes on self-serve chain and private groceries.

Bills also were introduced providing for the establishment of a state relief director to distribute state funds, but leaving the responsibility for the administration of poor relief with the local political subdivisions; and appropriating $1,000,000 to the department of public welfare for the construction of new buildings to relieve overcrowding the state mental hospitals.

In order to get first-hand information on the relief situation in the metropolitan areas, the House of Representatives appointed a committee to make a thorough investigation and report back not later than June 1.

Medical Faculty Promotions

Faculty promotions recently announced by President George W. Rightmire and the Board of Trustees of Ohio State University included the following in the College of Medicine: Surgery and gynecology—Dr. Leslie L. Bigelow, Dr. John W. Means, Dr. Philip J. Reel and Dr. William N. Taylor, associate professor to professor; Dr. Luke V. Zartman, assistant professor to associate professor; Dr. Paul H. Charlton and Dr. Judson D. Wilson, instructor to assistant professor; Dr. Huston F. Fulton, Dr. Walter H. Hamilton and Dr. H. P. Worstell, assistant to instructor. Pathology—Dr. Harry L. Reinhart, assistant professor to associate professor; surgical research—Dr. Frank E. Hamilton, assistant to instructor.

PROCEEDINGS OF THE COUNCIL

Procedure for Conduct of Study of Medical Care in Ohio Is Formulated at Session During Annual Meeting

A DINNER meeting of The Council was held at the Deshler-Wallick Hotel, Columbus, Ohio, on Tuesday evening, May 10, 1938, the day preceding the opening of the 92nd Annual Meeting of the Ohio State Medical Association. All Officers and Councilors were present. Members of the standing committees of the Association, delegates to the American Medical Association, and those in charge of Columbus Annual Meeting arrangements attended as guests.

On **motion** by Dr. Smith, seconded by Dr. Klotz and carried, the minutes of the April 10 meeting of The Council, published in the May, 1938, issue of *The Journal*, pages 562-565, were approved.

Membership Statistics—It was reported that the membership of the Association as of May 10 was 5,759 compared to 5,653 on the same date a year ago, and to 5,945 as of December 31, 1937.

1938 ANNUAL MEETING

A review of the program and details for the 1938 Annual Meeting, scheduled to open Wednesday morning, May 11, was made by Dr. Sherburne, chairman of the Committee on Scientific Work. A report on local arrangements was made by Dr. Verne A. Dodd, Columbus, general chairman of the Columbus Committees on Arrangements.

REGIONAL POSTGRADUATE LECTURES

Dr. Clyde L. Cummer, Cleveland, chairman of the Committee on Education, discussed the course of Regional Postgraduate Lectures being held in Region B at Chillicothe, Ohio. He reported that the total attendance at the first seven sessions of the scheduled eight sessions at Chillicothe had been 994, an average attendance of 142. The registration records revealed, according to Dr. Cummer, that 284 individual physicians had attended at least one of the seven sessions. Dr. Cummer stated that many complimentary reports had been received with respect to the lectures and he expressed satisfaction with the widespread interest and enthusiasm displayed by members in the counties composing Region B.

Plans have been completed, Dr. Cummer announced, for holding similar courses of lectures next Fall in Region C—Mansfield; Region D—Zanesville; and Region E—Dayton-Springfield.

Members of The Council expressed themselves as pleased with the postgraduate lecture project to date and complimented the committee on its work.

SURVEY OF MEDICAL CARE

Members of The Council reported on preliminary conferences which have been held in the various Councilor Districts with respect to the Survey of Medical Care sponsored by the American Medical Association. Preliminary plans for making the survey were discussed. Most of the Councilors reported they had contacted the proper officers of the county societies in their respective districts, or have made plans to do so at an early date.

Following a general discussion with respect to the conduct of the survey in Ohio, on **motion** by Dr. Sherburne, seconded by Dr. Smith and carried, the following procedure was approved by The Council:

1. Survey blanks shall be sent to the secretary of each county medical society in estimated quantities for distribution by the secretary, or to be turned over by the secretary to the individual or committee selected by the county society to conduct the survey in that county. Blanks shall be distributed to all counties on or before June 1, if possible.

2. Letter emphasizing high spots of the survey and procedure to be sent to each county society secretary at the time blanks are mailed from the Columbus office. Suggested letter approved.

3. Sample letter, which might be used by each county society in transmitting Blank No. 1 to individual physicians to be typed and mailed locally, read and approved.

4. Details as to conduct of survey locally to be left to the discretion of each county medical society. This would apply to the question as to whether non-members would be asked to participate; establishing details for return of blanks; designation of individual or committee to head up survey; contact by letter or by personal visitation, etc.

In adopting a **motion** made by Dr. Sherburne, seconded by Dr. Skipp and carried, The Council voted to request the cooperation of the Ohio State Dental Society, Ohio State Nurses' Association and the Ohio State Pharmaceutical Association in the distribution of Blank No. 1.

A suggestion received from WPA officials that WPA clients might be used in making the survey was discussed. It was the opinion of The Council that it would not be feasible to use WPA clients on a state-wide basis and that the matter of using such individuals should be left to the discretion of each county medical society.

MISCELLANEOUS BUSINESS

District Subsidy—Dr. Smith, chairman of the Committee on Auditing and Appropriations, re-

ported that there had been some confusion with respect to the use of the $200 subsidy, provided by the State Association annually for each Councilor District to be used in helping to defray expenses of district meetings. Following a general discussion by The Council as to how such money should be used in the respective districts, The Council **adopted a motion** by Dr. Smith, seconded by Dr. McCormick, establishing the following policy for guidance of the Committee on Auditing and Appropriations: Use of the annual subsidy, provided by the State Association for the Councilor Districts, shall be restricted to expenses incurred in obtaining speakers for the scientific program; for promotional work; and for providing adequate facilities for district meetings.

Letter from Dr. West—A communication from Dr. Olin West, Secretary of the American Medical Association, relative to cooperation between the Governor of Michigan and the Michigan State Medical Society on medical and public health questions, was read and ordered filed.

Refresher Courses—A report on the Refresher Courses in Obstetrics and Pediatrics, being conducted by the Bureau of Child Hygiene of the State Department of Health, was made for the information of The Council.

Legislation—There was a general discussion with respect to the Special Session of the Ohio General Assembly on poor relief, called by the Governor for May 16.

There being no further business, The Council recessed to meet Wednesday morning, May 11, 9:30 o'clock with the House of Delegates.

Attest: CHARLES S. NELSON,
Executive Secretary.

Youngstown Program Popular

Four hundred and eighty-seven physicians from 87 cities and towns in Ohio, Pennsylvania and West Virginia registered at the Eleventh Annual Postgraduate Day of the Mahoning County Medical Society, held at Hotel Ohio, April 28. Attendance was the second largest in the history of the assembly. Speakers were: Dr. Frank H. Lahey, Dr. Gilbert Horrax, Dr. Everett D. Kiefer and Dr. Elmer C. Bartels of the Lahey Clinic, Boston, Mass. Committee chairmen responsible for the successful meeting were: Dr. James B. Birch, Postgraduate Day; Dr. John Noll, Program; and Dr. Louis S. Deitchman, Publicity.

Open New Offices

Physicians who have recently established new locations in Ohio include Dr. L. W. Adams and Dr. R. B. Brown, Columbus; Dr. M. D. Gamble, Williamsport; Dr. H. C. Kurtz, Stoutsville; Dr. W. R. Liebschner, Deshler, and Dr. E. Paul Shepard, Chillicothe.

SPACE ON OHIO SPECIAL TRAIN TO A.M.A. SESSION STILL AVAILABLE

Space still is available aboard the Ohio State Medical Association Special Train to the American Medical Association meeting at San Francisco.

Those who are making a last-minute decision to make the great trip aboard the Ohio Special, as outlined in the March issue of **The Ohio State Medical Journal,** should get in touch immediately with the **Executive Secretary, 1005 Hartman Theater Building, Columbus. Wire or telephone if possible,** so that tickets, tour credentials, etc., can be mailed in time to reach you before June 7 when the Ohio Special will pull out of Chicago.

All classes of accommodations—open berths, compartments and drawing rooms—are available.

No person planning to attend the A.M.A. meeting can afford to pass up this excellent combined business-pleasure jaunt.

Send in your request for reservations immediately.

Ohio Federation of Public Health Officials Hold Annual Convention

The Ohio Federation of Public Health Officials held its annual convention at the Deshler-Wallick Hotel, Columbus, Friday, April 29. Dr. H. J. Powell, Bowling Green, health commissioner of Wood County, presided at the section meeting of health commissioners. Speakers included: Dr. Walter H. Hartung, State Director of Health; Dr. E. E. Huber, U. S. Public Health Service, Washington, D. C.; Dr. R. W. DeCrow, chief, Bureau of Health Organization, State Department of Health, and Dr. M. C. Hanson, Toledo, city health commissioner. Dr. R. H. Markwith, Akron, Summit County health commissioner, and president of the Federation, presided at the luncheon session. Dr. A. T. McCormack, Louisville, Ky., State Director of Health for Kentucky and President of the American Public Health Association, spoke on "Whose Responsibility is Public Health". All officers of the federation were re-elected. They are: Dr. Markwith, president; Dr. H. H. Pansing, Dayton, vice president; Dr. W. D. Bishop, Greenville, secretary and treasurer, and Dr. George D. Lummis, Middletown, delegate to the American Public Health Association.

PROGRAM AND SOCIAL FEATURES OF NINETY-SECOND ANNUAL MEETING SET HIGH MARK IN QUALITY AND INTEREST

WHETHER it was due to the excellent program, the two-day concentrated session, central location of the place of meeting, or evidence of increasing interest in organization activities on the part of the medical profession, the fact remains that the Ninety-Second Annual Meeting of the Ohio State Medical Association held at the Neil House, Columbus, May 11 and 12, was the best attended meeting in the history of the Association. The total registration was 2068, including 1414 physicians, of whom 1330 were members, comprising almost one-fourth of the membership.

All of the general session and the section meetings were exceptionally well attended, and comment on the papers presented was generally complimentary.

WELL-DESERVED CREDIT

Much of the success of the meeting was the result of the energetic and efficient work done by two committees, viz., the Committee on Scientific Work of the State Association and the Committee on Local Arrangements of the Columbus Academy of Medicine, and the officers of the Scientific Sections.

Members of the committees referred to were:

Committee on Scientific Work—Dr. C. C. Sherburne, Columbus, chairman; Dr. Albert F. Kuhl, Dayton; Dr. Stanley D. Giffin, Toledo; Dr. Claude B. Norris. Youngstown, and Dr. M. M. Zinninger, Cincinnati.

Committee on Local Arrangements, Columbus Academy of Medicine—Dr. Verne A. Dodd, general chairman; Dr. Wm. B. Morrison, President, Columbus Academy of Medicine, vice chairman; Reception: Dr. Leslie L. Bigelow, chairman; Dr. J. H. J. Upham, Dr. H. M. Platter, Dr. Wells H. Teachnor, Dr. Joseph Price, Dr. Andre Crotti, Dr. Charles A. Doan, Dr. Jonathan Forman, Dr. J. F. Bateman, Dr. E. J. Emerick, Dr. Sidney McCurdy, Dr. W. B. Morrison, Dr. Mary Ann Graber, and Dr. Charles J. Shepard. Halls and Meeting Places: Dr. Burton F. Barney, chairman; Dr. H. M. Codfelter, Dr. A. A. Hall, Dr. Robert C. Kirk, Dr. Tom F. Lewis, and Dr. Thomas F. Ross. Annual Banquet: Dr. Louis N. Jentgen, chairman; Dr. George T. Harding, III, Dr. Russel G. Means, Dr. Edwin J. Stedem, and Dr. J. W. Wilce. Hobby Exhibit: Dr. Paul W. Palmer, chairman; Dr. H. M. Gilmore and Dr. C. W. McGavran. Projection Apparatus: Dr. Harry L. Reinhart, chairman; Dr. H. B. Davidson and Dr. Gilman D. Kirk.

HOUSE OF DELEGATES

Opening session of the House of Delegates Wednesday morning was attended by representatives of 69 counties, another new record in the history of Annual Meetings. (Complete minutes of House of Delegates proceedings, pages 687 to 697 in this issue).

At the opening session, Dr. Wm. B. Morrison, president of the Columbus Academy of Medicine, welcomed the delegates and presented Dr. John B. Alcorn, Columbus, President of the State Association, who then made his Presidential Address, entitled "Shall We Lead or Be Led?". Complete text of Dr. Alcorn's address appears on pages 683 to 685, this issue of *The Journal*.

Reports of standing committees as published in the April issue of *The Journal*, were presented; a nominating committee elected; reference committees appointed by Dr. Alcorn, and resolutions introduced.

By-laws of the State Association were amended discontinuing the Committee on Medical Defense, and establishing a new committee known as the Judicial and Professional Relations Committee, to take the place of the Committee on Medical Defense and the Judicial Committee of The Council.

Final session of the House of Delegates was held Thursday afternoon, following a luncheon for delegates and members of the Columbus Committee on Arrangements.

RESOLUTIONS ADOPTED

Resolutions approved by the House of Delegates covered the following subjects: Legislative committees of the State Association and county medical societies urged to make special effort to have public officials make appointments of physicians to deal with public health and medical problems, from lists of physicians submitted by state or county medical organizations; endorsement of the nation-wide survey of medical care initiated by the American Medical Association, and request for cooperation of county medical societies and individual physicians in the project; authorization of an amendment to the purpose clause of the Articles of Incorporation of the State Association to conform it to the purpose clause of the Constitution of the Association; approval of legislation which would prohibit the retail sale of hypnotic and somnifacient drugs except on prescription of a physician, dentist or veterinarian.

OFFICERS AND COUNCILORS ELECTED

Dr. Parke G. Smith, Cincinnati, completing his fifth year as Councilor, was unanimously elected President-Elect.

The following Councilors were re-elected for two-year terms: Dr. O. P. Klotz, Findlay, Third

District; Dr. C. W. Kirkland, Bellaire, Seventh District; Dr. I. P. Seiler, Ninth District.

Dr. L. Howard Schriver, Cincinnati, member of the Committee on Public Relations and Economics of the State Association, was elected Councilor for the First District, succeeding Dr. Smith.

Dr. E. P. McNamee, Cleveland, was elected Councilor for the Fifth District, succeeding Dr. Harry V. Paryzek, who was not a candidate for re-election.

A.M.A. DELEGATES

Dr. G. F. Zinninger, Canton, was elected delegate to the American Medical Association for 1938, succeeding the late Dr. J. P. DeWitt, Canton. Dr. Wm. M. Skipp, Youngstown, was named as alternate to Dr. Zinninger.

The following delegates to the A.M.A. for the years 1938 and 1939 were elected: Dr. Charles W. Stone, Cleveland; Dr. Ben R. McClellan, Xenia; Dr. Carl R. Steinke, Akron, and Dr. E. R. Brush, Zanesville. Alternates elected were: Dr. John B. Alcorn, Columbus; Dr. D. W. Hogue, Springfield; Dr. C. C. Sherburne, Columbus, and Dr. V. N. Marsh, Painesville. Holdover delegates are Dr. C. W. Waggoner, Toledo, and Dr. C. E. Kiely, Cincinnati; alternates, Dr. L. Howard Schriver, Cincinnati, and Dr. Charles Lukens, Toledo.

The House of Delegates selected Toledo as the place for the 1939 Annual Meeting, the vote being 73 for Toledo and 32 for Cedar Point. In the event that the 1939 session of the American Medical Association is held in Cleveland, the House of Delegates voted that no scientific session of the State Association should be held that year, and that business sessions of the House of Delegates shall be held in Cleveland at the time of the A.M.A. Session.

Following his installation as President, Dr. Barney J. Hein, Columbus, made a brief address which appears in the Proceedings of the House of Delegates.

NEW COMMITTEE APPOINTMENTS

Dr. Hein announced the following committee appointments: Dr. E. O. Swartz, Cincinnati, member of the Committee on Public Relations and Economics for a term of five years; Dr. Charles W. Stone, Cleveland, chairman of the committee during 1938-39; Dr. Clyde L. Cummer, Cleveland, member of the Committee on Education for a term of five years, and to serve as chairman during 1938-39; Dr. Claude B. Norris, Youngstown, member of the Committee on Scientific Work for a term of five years; Dr. Albert F. Kuhl, Dayton, to be chairman during 1938-39. Members of the newly-created Judicial and Professional Relations Committee: Dr. Leslie L. Bigelow, Columbus, two years, and chairman during 1938-39; Dr. John A. Caldwell, Cincinnati, one year; Dr. James G. Kramer, Akron, three years; Dr. G. A. Woodhouse, Pleasant Hill, four years, and Dr. J. E. Tuckerman, Cleveland, five years.

GENERAL SESSIONS

Guest speakers at the general sessions were: Dr. Irvin Abell, Louisville, Ky., President-Elect of the American Medical Association; Dr. Sumner L. Koch, Chicago, Ill.; Dr. Fred Wise, New York, N. Y.; Dr. Perrin H. Long, Baltimore, Md.; Dr. Hugo Roesler, Philadelphia, Pa., and Dr. Clara M. Davis, Winnetka, Illinois.

Representatives of the scientific sections appearing on the program of the general sessions were: Dr. Charles E. Kinney, Cleveland, Section on Eye, Ear, Nose and Throat; Dr. Clyde L. Cummer, Cleveland, Section on Medicine; Dr. H. E. McClenahan, Youngstown, Section on Obstetrics and Gynecology; Dr. Thomas E. Jones, Cleveland, Section on Surgery; Dr. E. A. Baber, Cincinnati, Section on Nervous and Mental Diseases; Dr. John A. Toomey, Cleveland, Section on Pediatrics.

An innovation at this year's meeting which attracted considerable interest was a special demonstration of first-aid procedures by Dr. Drew L. Davies, Columbus, and seven members of the State Highway Patrol, presented at the Wednesday afternoon general session.

SCIENTIFIC SECTIONS

Officers of the scientific sections, essayists and scheduled discussants were:

Section on Medicine—Dr. C. L. McKibben, Toledo, chairman, and Dr. John Noll, Jr., Youngstown, secretary. Essayists: Dr. Harold F. Koppe, Dayton; Dr. Leon Schiff and Dr. Sander Goodman, Cincinnati; Dr. John T. Quirk, Piqua; Dr. G. W. Brugler, Cadiz, and Dr. Louis G. Herrman, Cincinnati. Discussants: Dr. A. B. Brower, Dayton; Dr. Walter H. Stix, Cincinnati; Dr. Russell N. Speckman, Cincinnati; Dr. Roy W. Scott, Cleveland, and Dr. Samuel H. Sedwitz, Youngstown.

Section on Eye, Ear, Nose and Throat—Dr. Hugh G. Beatty, Columbus, chairman, and Dr. Fred W. Dixon, Cleveland secretary, Essayists: Dr. Arthur M. Culler, Dayton; Dr. Harry C. Rosenberger, Cleveland; Dr. James O. Beavis, Dayton; Dr. Merle Edison Scott, Massillon, and Dr. Gabriel Tucker, Philadelphia, Pa., guest speaker. Discussants: Dr. Ralph E. Boice, Toledo; Dr. O. J. Walker, Youngstown; Dr. Fred M. Douglass, Toledo, and Dr. Harry M. Goodyear, Cincinnati.

Section on Obstetrics and Gynecology—Dr. G. C. Gilfillen, Dayton, chairman, and Dr. Howard P. Taylor, Cleveland, secretary. Essayists: Dr. Walter K. Gregg, Dayton; Dr. Martin W. Diethelm, Toledo; Dr. Floyd S. Mowry, Cleveland, and Dr. Gordon L. Erbaugh, Dayton. Discussants: Dr. Carl C. Borden, Miamisburg; Dr. Ray-

mond C. King, Toledo; Dr. James L. Reycraft, Cleveland, and Dr. Karl W. Horn, Dayton.

Section on Surgery—Dr. Robert C. Austin, Dayton, chairman, and Dr. W. K. Allsop, Youngstown, secretary. Essayists: Dr. C. A. Coleman and Dr. M. W. Coleman, Dayton; Dr. Carl H. Lenhart, Cleveland; Dr. Wm. Dean Collier, Youngstown; Dr. Joseph P. Evans, Cincinnati; Dr. George I. Bauman, Cleveland. Discussants: Dr. Frank W. Harrah, Columbus; Dr. Elmer R. Arn, Dayton; Dr. F. W. McNamara, Youngstown; Dr. Wm. James Gardner, Cleveland, and Dr. Harold R. Conn, Akron.

Section on Pediatrics: Dr. A. G. Helmick, Columbus, chairman, and Dr. E. A. Peterson, East Cleveland, secretary. Essayists: Dr. Carl V. Moore, Columbus; Dr. Albert J. Bell, Cincinnati; Dr. Harry G. Pamment, Toledo; Dr. E. W. Netherton, Cleveland, and Dr. Earl H. Baxter, Columbus. Discussants: Dr. George M. Guest, Cincinnati; Dr. Donald C. Mebane, Toledo; Dr. Lawrence I. Clark, Toledo; Dr. J. E. Rauschkolb, Cleveland, and Dr. Berman S. Dunham, Toledo.

Section on Nervous and Mental Diseases: Dr. Jos. L. Fetterman, Cleveland, chairman, and Dr. A. T. Hopwood, Orient, secretary. Essayists: Dr. Mel A. Davis, Painesville; Dr. Beatrice Postle, Columbus; Dr. George T. Harding, Columbus; Dr. Leonard M. Dub and Dr. Louis A. Lurie, Cincinnati; Dr. Guy H. Williams, Jr., Dr. Helen M. Kingsbury, Dr. David E. Bixby, Dr. Roger F. Scherb and Dr. Charles W. Stone, Cleveland. Discussants: Dr. Douglas A. Johnston, Cincinnati; Dr. Richard E. Stout, Cleveland; Dr. Douglas Goldman, Cincinnati, and Dr. Fetterman and Dr. Hopwood.

PUBLIC HEALTH LUNCHEON

Approximately 60 physicians attended a round-table luncheon session of the Section on Public Health and Preventive Medicine, Wednesday noon, May 11, at the Deshler-Wallick Hotel. The program was arranged by Dr. H. H. Pansing, Dayton, chairman, and Dr. Wm. E. Blair, Lebanon, secretary of the section. Speakers were: Mr. Leo F. Ey, Columbus, chief, Division of Laboratories, State Department of Health, and Dr. Warren C. Breidenbach, Dayton, member of the Ohio Public Health Council.

SCIENTIFIC EXHIBIT

For the fourth successive year, the Scientific Exhibit was one of the outstanding features of the Annual Meeting. Arranged by Dr. C. C. Sherburne, Columbus, assisted by the Committee on Scientific Work, the exhibit was freely praised for its practical value, and was well-attended throughout the entire session.

A special exhibit covering the diagnosis and treatment of pneumonia was presented by the Department of Internal Medicine, University of Cincinnati College of Medicine, under the direction of Dr. James Ruegsegger.

Other participants in the Scientific Exhibit were: Dr. Russell L. Haden, Dr. W. J. Zeiter, Dr. Eugene Freedman, Dr. Henry T. Stiles, Dr. Joseph L. Fetterman, Dr. Claude S. Beck, Dr. Walter C. Hill, Dr. Merthyn A. Thomas, Dr. Harry L. Farmer, Dr. George L. Sackett, Dr. George Crile, Jr., Dr. W. James Gardner, Dr. William A. Nosik, Cleveland; Dr. George Lyford, Dr. Joseph P. Evans, Dr. Mont R. Reid, Dr. Louis G. Herrman, Dr. A. Gerson Carmel, Dr. Leon Schiff, Dr. Sander Goodman and Dr. David Lerner, Cincinnati; Dr. John T. Murphy, Dr. C. E. Hufford, Dr. Morris W. Selman and Dr. Bernhard Steinberg, Toledo; Dr. Samuel H. Sedwitz, Youngstown; Dr. Wynne M. Silbernagel, Dr. R. S. Fidler, Dr. Horace B. Davidson, Dr. Huston F. Fulton, Dr. Emmerich von Haam and Dr. Ralph M. Hartwell, Columbus; American Medical Association; State Department of Health; Ohio State Pharmaceutical Association and Columbus Academy of Pharmacy; Public Health Section of the American Institute of Laundering; State Industrial Commission by Dr. Sidney McCurdy, medical supervisor, and Dr. Roy J. Secrest, assistant medical supervisor.

HOBBY SHOW

Much favorable comment was heard concerning the Hobby Show, arranged by Dr. Paul W. Palmer, Columbus, and his special committee. Physicians who took part included: Dr. Wm. T. Palchanis, Columbus, oil paintings and wood carvings; Dr. Lloyd Jonnes, Circleville, walnut tea table and other woodwork; Dr. Howard E. Jones, Circleville, bronze bust and water colors; Dr. Wm. Kelley Hale, Wilmington, oil painting; Dr. Charles T. Grattidge, Laurelville, cocktail table, smoking unit, etc., made from natural woods; Dr. Palmer, working model of locomotive; Dr. F. E. Rosnagle, London, two rifles, remodeled and mounted on walnut stocks; Dr. R. A. Rogers, Columbus, whose hobby is aviation, photographed in front of his airplane; Dr. Howard M. Gilmore, Columbus, patterns, castings and miniature racing engine; Dr. Thomas Hubbard, Ashtabula, book-rests; Dr. A. R. Olmstead, Canton, violins (Dr. Olmstead made 58 violins from 1926-1936); Dr. Benjamin Carlson, Lorain, pictorial photographs; Dr. George Wm. Keil, Columbus, replica of original of Northwest Territory ox-team on 1938 Ohio license plates, carved by prisoner at Ohio State Penitentiary.

TECHNICAL EXHIBIT

The spacious mezzanine floor of the Neil House afforded a lay-out for the Technical Exhibit which was a "natural" for exhibitors of surgical and X-ray equipment, medical books, pharmaceutical supplies, etc. Inasmuch as the cost of the An-

nual Meeting is largely financed by the rental paid by these exhibitors, their patronage is always an important factor in arranging the meeting.

Technical exhibitors who displayed their products at the Columbus meeting were: A. S. Aloe Co., St. Louis, Mo.; American Optical Company, Southbridge, Mass.; Arlington Chemical Company, Yonkers, N. Y.; Bowman Bros. Drug Co., Canton; Cameron Heartometer Company and Cameron Surgical Specialty Co., Chicago, Ill.; S. H. Camp & Co., Jackson, Mich.; Coca-Cola Co., Atlanta, Ga.; Columbus Hospital Supply Co., Columbus; DeVilbiss Co., Toledo; Electro-Medical Equipment Co., Cleveland; General Electric X-Ray Corporation, Chicago, Ill.; Gerber Products Co., Fremont, Mich.; H. J. Heinz Co., Pittsburgh, Pa.; Holland-Rantos Co., Inc., New York City; Horlick's Malted Milk Corporation, Racine, Wis.; Hynson, Westcott & Dunning, Inc., Baltimore, Md.; Jones Metabolism Equipment Co., Cleveland; Jones Metal Products Co., West Lafayette; Jones Surgical Supply Co., Cleveland; Lederle Laboratories, Inc., New York City; Liebel-Flarsheim Co., Cincinnati; J. B. Lippincott Co., Philadelphia, Pa.; Mead Johnson & Co., Evansville, Ind.; Medical Protective Co., Wheaton, Ill.; Mellin's Food Co., Boston, Mass.; Wm. S. Merrell Co., Cincinnati; M. & R. Dietetic Laboratories, Inc., Columbus; C. V. Mosby Co., St. Louis, Mo.; Nestle's Milk Products, Inc., New York City; Peerless Optical Co., Columbus; Petrolagar Laboratories, Inc., Chicago, Ill.; Philip Morris & Co., Ltd., New York City; E. J. Rose Mfg. Co., Inc., Cleveland; W. B. Saunders Co., Philadelphia, Pa.; S. M. A. Corporation, Cleveland; U. S. Standard Products Co., Woodworth, Wis.; W. T. Wagner's Sons Co., Cincinnati; Wallace & Tiernan Products, Inc., Belleville, N. J.; Wendt-Bristol Co., Columbus; Westinghouse X-Ray Co., Inc., Long Island City, N. Y.; White-Haines Optical Co., Columbus; Max Wocher & Son Co., Cincinnati; John Wyeth & Brother, Inc., Philadelphia, Pa., and Zemmer Co., Pittsburgh, Pa.

ANNUAL BANQUET

Approximately 300 physicians and their guests attended the Annual Banquet Thursday night in the Main Ballroom of the Neil House, arranged by the Columbus Academy of Medicine. Dr. Louis N. Jentgen, Columbus, was toastmaster. Among those seated at the Speaker's Table were: Dr. John B. Alcorn, Columbus, retiring President; Dr. Barney J. Hein, Toledo, President; Dr. Parke G. Smith, Cincinnati, President-Elect; Dr. Edwin M. Huston, Dayton, Past-President; Dr. Wm. B. Morrison, President of the Columbus Academy of Medicine; members of the Council of the Ohio State Medical Association and the members of the Banquet Committee.

Dr. Huston presented the Past-President's gavel, a suitably inscribed replica of the official gavel of the Association, to Dr. Alcorn, and complimented him on his highly successful administration.

Principal speaker of the evening was C. William Duncan, columnist for the Philadelphia Evening Public Ledger, who entertained his listeners with "Close Ups of Famous People." based on personal interviews with celebrities in the course of his newspaper work. Mr. Duncan related interesting anecdotes and gave his impressions concerning Madame Schuman-Heink, Vice President Garner, Helen Hayes, Senator Borah, J. Edgar Hoover, Miriam Hopkins, Babe Ruth, Dizzy Dean, the late Huey P. Long, etc. The reception accorded Mr. Duncan proved the wisdom of the committee which selected him as banquet speaker. Appropriate music was presented during the dinner by Gardner's Orchestra, Columbus.

ENTERTAINMENT OF WOMEN GUESTS

One of the most effective bits of work done during the Annual Meeting was that of the Committee on Entertainment of Women Guests, composed of Mrs. Huston F. Fulton, chairman; Mrs. J. E. Brown, Jr., Mrs. Harry LeFever, Mrs. Russell G. Means, Mrs. Link Murphy, Mrs. W. B. Morrison, Mrs. H. M. Clodfelter, Mrs. Bruce E. Lindsey, Mrs. E. W. Harris, and Mrs. Francis Thomas, all wives of Columbus physicians.

Thanks to the careful planning of the committee and the enthusiasm with which they accepted their responsibility, a fine program of entertainment was provided for the 318 women guests who registered at the meeting.

The program on Wednesday afternoon consisted of a visit to the Columbus Gallery of Fine Arts and tea at the Art Gallery.

A number of the women guests played golf at the Scioto Country Club Thursday morning, and approximately 100 attended the luncheon and bridge party there Thursday afternoon. The luncheon was given in honor of Mrs. J. H. J. Upham, Columbus; Mrs. John B. Alcorn, Columbus, and Mrs. Barney J. Hein, Toledo.

GROUP LUNCHEONS

A number of special group luncheons and breakfasts were held during the Ninety-Second Annual Meeting. These included a luncheon Thursday noon, arranged by Dr. Jos. L. Fetterman, Cleveland, and Dr. A. T. Hopwood, Orient, officers of the Section on Nervous and Mental Diseases for physicians interested in that specialty; a luncheon Thursday noon for women physicians sponsored by the Columbus Women's Medical Club, in charge of Dr. Pauline P. Rossell; a round-table discussion and luncheon Wednesday noon for physicians interested in allergy, arranged by Dr. William F. Mitchell, Columbus; reunion of the Class of 1897, Ohio Medical University, Thursday noon; reunion of the Class of 1898, Ohio Medical University, Thursday noon;

luncheon for graduates of Northwestern University Medical School, Thursday noon, and a breakfast for physicians interested in medical history, arranged by Dr. Jonathan Forman, editor of *The Ohio State Medical Journal,* Thursday morning.

Names of physicians who attended several of these functions have been furnished *The Journal.* They are as follows:

Allergy luncheon: Dr. Karl D. Figley and Dr. Bernard Steinberg, Toledo; Dr. L. E. Seyler, Dr. G. C. Grout, Dayton; Dr. Wm. F. Mitchell, Dr Jonathan Forman, Dr. Pauline P. Rossel, and Dr. Alice M. Bustin, Columbus; Dr. I. M. Hinnant, Dr. Milton B. Cohen, Dr. McKinley London, Dr. J. G. Graver, Dr. Benj. Nosik and Dr. Myron A. Weitz, Cleveland; Dr. L. H. Harris, Elyria; Dr. A. R. Zoss, Dr. Charlotte B. Wiedemer, Cincinnati, and Dr. J. H. Frazer, Arlington Chemical Co., New York.

Reunion luncheon, Class of 1897, Ohio Medical University—Dr. H. S. Davidson, Akron; Dr. Geo. R. Gardner, Ashville; Dr. E. W. Euans, Dr. Geo. W. Willard, Dr. Edw. Reinert, Dr. L. C. Benkert and Dr. J. D. Dunham, Columbus; Dr. John S. Cherrington, Logan, Dr. P. D. Longbrake, Marysville, and Dr. L. E. Wills, Waverly.

Reunion luncheon, Class of 1898, Ohio Medical University—Dr. D. W. Shumaker, Dover; Dr. F. D. Halleck, Bowling Green; Dr. John C. Archer, Shadyside; Dr. J. J. McClung, Jackson; Dr. W. H. Maddox, Wauseon; Dr. W. A. Lindsay, Niles; Dr. Wm. F. King, Indianapolis, Ind., Dr C. L. Ramsey, Powhatan Point; Dr. Lynn M. Jones, Dayton.

Breakfast meeting—Ohio Committee on Medical History and Archives of the Ohio State Archaeological and Historical Society; Dr. Jonathan Forman, Columbus, chairman; K. W. McKinley, Columbus, representing Harlow Lindley, secretary of the committee and the society; Dr. Howard Dittrick, Cleveland; Dr. Howard Jones and Dr. Lloyd Jonnes, Circleville; Dr. David A. Tucker, Jr., Cincinnati; Dr. James J. Tyler, Warren; Dr. George F. Beery, Lancaster; Robert G. Paterson, Ph.D.; Dr. Harry L. Reinhart, Dr. Donald D. Shira, Dr. George P. Simms and Dr. Thomas F. Ross, Columbus.

PAST-PRESIDENTS' DINNER

The annual dinner given by the Ohio State Medical Association for Past-Presidents was attended Wednesday evening by the following: Dr. Ben R. McClellan, Xenia, 1906-07; Dr. Charles Lukens, Toledo, 1920-21; Dr. Robert Carothers, Cincinnati, 1922-23; Dr. Jos. S. Rardin, Portsmouth, 1923-24; Dr. Leslie L. Bigelow, Columbus, 1927-28; Dr. D. C. Houser, Urbana, 1931-32; Dr. Herbert M. Platter, Columbus, 1932-33; Dr. Clyde L. Cummer, Cleveland, 1933-34; Dr. John A. Caldwell, Cincinnati, 1934-35; Dr. Ralph R. Hendershott, Tiffin, 1935-36; Dr. Edwin M. Huston, Dayton, 1936-37; Dr. John B. Alcorn, Columbus, 1937-38, and Dr. Barney J. Hein, Toledo, President-Elect.

The Past-Presidents sent a telegram expressing their best wishes to Dr. Charles W. Stone, Cleveland, President of the Association in 1928-29, who was unable to attend the dinner because of illness.

Much of the success of the meeting was due to the splendid physical arrangement of the Neil House and the courteous and efficient service provided by Tom Sabrey, manager, and his able associates.

Newspaper coverage of the meeting was excellent, particularly by the press associations, which sent newspapers throughout the state dispatches concerning the actions of the House of Delegates, reports of standing committees, and the Presidential Address of Dr. Alcorn.

Child Health Day Radio Talks

At the request of Dr. Arthur W. Thomas, chief Bureau of Child Hygiene, State Department of Health, 21 of Ohio's 24 radio stations granted 15 minute radio periods for appropriate talks in celebration of Child Health Day, May 1. A list of the cooperating stations and speakers follows: WADC, Akron, Dr. Jos. M. Ulrich; WBLY, Lima, Dr. Gail E. Miller; WBNS, Columbus, Dr. Walter H. Hartung; WCLE, Cleveland, Dr. L. F. Hall; WCOL, Columbus, Dr. A. W. Thomas; WCPO, Cincinnati, Dr. J. Albert Bell; WGAR, Cleveland, Dr. H. J. Knapp; WHBC, Canton, Dr. R. D. Schirack; WHIO, Dayton, Dr. Sterling Ashmun; WHK, Cleveland, Dr. H. J. Gerstenberger; WHKC, Columbus, Dr. S. D. Edelman; WICA, Ashtabula, Dr. J. H. Park; WJW, Akron, Dr. J. G. Kramer; WKRN, Youngstown, Dr. E. R. Thomas; WKRC, Cincinnati, Dr. Geneva Shong-Rothemund; WLW, Cincinnati, Dr. Robert A. Lyon and Dr. Carl A. Wilzbach; WOSU, Columbus, Dr. Elmer G. Horton; WPAY, Portsmouth, Dr. A. W. Thomas; WSPD, Toledo, Dr. L. I. Clark; WTAM, Cleveland, Dr. Richard A. Bolt; and WTOL, Toledo, Dr. Bernard Botsch.

Dr. Hertzog Heads Homeopaths

Dr. Lucy Stone Hertzog, Chardon, president of the Geauga County Medical Society, was installed as president of the Ohio State Homeopathic Medical Society at its 74th annual meeting in Columbus, May 5 and 6. Other officers are: Dr. Horace E. Reed, Dover, president-elect; Dr. George F. Linn, Norwalk, vice president; Dr. Charles E. Geiser, Cincinnati, secretary; and Dr. George Irvin, Orrville, treasurer.

DR. W. B. MORRISON, COLUMBUS, IS NEW CHAMPION OF OHIO STATE MEDICAL GOLFERS' ASSOCIATION

EIGHTEENTH Annual Tournament of the Ohio State Medical Golfers' Association was held at the Scioto Country Club, Columbus, Tuesday, May 10, 1938, as a forerunner of the Ninety-Second Annual Meeting of the Ohio State Medical Association. It was a perfect day for golf and the largest field in years—a total of 117 physician golfers—participated in the tournament which was one of the most successful ever held by the golfers' association.

The Columbus committee, under the chairmanship of Dr. Roy J. Secrest, did a marvelous job in caring for the pleasure and entertainment of the visiting players and in handling the arrangements for the tournament. The Scioto Country Club is among the finest in the state and those present thoroughly enjoyed playing its sporty course as well as the delightful club-house facilities and appointments.

The usual dinner in the evening left nothing to be desired and fulfilled the epicurian wish of even the most exacting food specialists. Dr. Richard P. Bell, president, presided at the dinner and was master of ceremonies in the distribution of prizes. A most impressive array of prizes were awarded to the players. The list included leather golf bags, golf shoes, cigarette lighters and cases, golf accessories, a radio, a gold wrist watch, medical bags and supplies, and an endless assortment of other valuable prizes in addition to the traditional trophies awarded for the various events.

WINS CHAMPIONSHIP WITH 160 STROKES

Dr. W. B. Morrison, a newcomer in the golfers' association, came through with close competition to win the championship title and trophy for this year. He played the morning round in 81 and came back with a neat 79 on the second eighteen holes, for a total of 160 strokes. Dr. F. T. Gallagher, Cleveland, was runner-up with a score of 163, while Dr. J. J. Harrison, Napoleon, was only one stroke behind with a score of 164 for the 36 holes of play.

The Ohio State Medical Journal Trophy, representative of the Junior Championship and open to players up to 35 years of age, was won by Dr. Harrison, Napoleon, with his score of 164. Second place in this event went to Dr. D. R. Printz, Lima, with a score of 165, while Dr. S. D. Zuker, Toledo, came through with a score of 171 for third prize. The group of players in this particular event is increasing each year.

DR. BRENNAN, AKRON, WINS PRESIDENT'S TROPHY

Dr. R. P. Bell presented a handsome "family size" electric roaster as his President's Trophy for the Blind Bogey winner. Nine players had the lucky number—76—and through a process of elimination Dr. D. C. Brennan, Akron, was winner.

Dr. C. A. Hyer, Columbus, always a leader in the annual tournament, was winner of the State Auto Mutual Insurance Trophy awarded for low gross, first 18 holes of play, in the field of players from 36 to 45 years of age. He turned in a score of 80, while Dr. J. J. Marek, Cleveland, winner of the championship in 1937, took second place in this event with a score of 81. Third prize went to Dr. Jerome Zeigler, Cincinnati, with an 89 for the 18 holes of play.

The Buckeye Union Casualty Trophy, awarded for low gross, first 18 holes of play for players between 46 and 55 years of age, was won by Dr. Wm. A. Welsh, Youngstown, with a score of 79. Dr. Welsh won the Championship Trophy in 1936 and was well up in the running again this year. Dr. J. D. Fouts, Dayton, took second place with a score of 84 and third prize was awarded to Dr. G. F. Bowman, Toledo, who turned in a score of 86.

MILL'S TROPHY FOR GRAND-DAD'S PRIZE

A new trophy, handsome and appropriate, designated as The Mills Trophy, was awarded for low gross, first 18 holes of play in the "young-oldster's" group—players over 56 years of age. Dr. E. C. Yingling, Lima, was the winner with a score of 91. Second place went to Dr. J. B. Sampsell, Van Wert, another veteran player, with a score of 92; third prize in this event was taken by Dr. W. D. Inglis, Columbus, who in his younger days was a par-shooter and winner of the Championship Trophy in the first tournament ever held in 1921.

Winners in the first nine hole gross score event were Dr. R. O. Ruch, Lima, with a 41; Dr. O. F. Rosenow, Columbus, with a 42; and Dr. Barney G. Shaffer, Toledo, with a 43.

In the second nine hole gross score event, Dr. T. Willis, Cleveland, came in first with a score of 36, second and third prizes going to Dr. R. C. Obetz, Columbus, with a 41 and Dr. W. R. Riddell, Jackson, also with a score of 41.

Dr. W. P. Smith, Columbus, took first prize in the third nine hole gross score event with a low 39. Dr. J. I. Collins, Toledo, came in second with a 40, while third prize was awarded to Dr. D. E. Sauer, Marietta, with a score of 43.

The fourth nine hole gross score event listed Dr. L. M. Otis, Celina, also a former championship holder, in first place with a score of 39. Dr. Louis Mark, Columbus, took second prize with a score of 40 and third prize was won by Dr. Bud O'Brien, Cleveland, with a 41.

Among those players who enjoy plenty of ex-

ercise with their golf, Dr. G. R. Gardiner, Ashville, was given a handsome prize for his high gross score of 124 for 18 holes. Runner-up was Dr. Ross Knoble, Sandusky, with a total of 120 strokes. Dr. A. P. Hancuff, Toledo, came through for a prize and recognition with a score of 118.

CLEVELAND WINS TEAM TROPHY

Dr. S. J. Coulter of Toledo, a great lover of golf and keenly interested in promoting the good-fellowship incident to the annual association tournament, presented a handsome new trophy for the Team Championship, awarded to the city having the low gross score for a five man team. This trophy must be won three times for permanent possession. Cleveland nosed out Columbus by two strokes for initial possession. The low Cleveland score was 847 while Columbus totaled a score of 849 strokes.

Special prizes were given for birdies and special events. Every player took away an award for his tournament participation.

GERBER PRESENTED PARTING GIFT

Mr. H. C. Gerber, Jr., Secretary of the Golfers' Association for many years, was presented with a handsome desk pen as a farewell gift from the association. Mr. Gerber, former Executive Secretary of the Toledo Academy of Medicine, recently took a similar position as Executive Secretary of the Michigan State Dental Society with headquarters in Lansing, Michigan. He went to Columbus to assist the local committee in handling the tournament arrangements again this year.

RECOGNITION FOR LATE DR. DEWITT

The members of the association were deeply saddened to learn of the recent death of Dr. John P. DeWitt, Canton, one of the charter members of the organization and always present at the annual tournament to lend his inimitable and charming personality to the good-fellowship of the group. During the dinner those present paid their tribute of respect to Dr. DeWitt and it was voted that a permanent trophy be placed in the association competition events as a token of esteem and memory.

The association likewise voted its thanks and appreciation to the Columbus committee for its excellent work and to the management of the Scioto Country Club.

DR. WRIGHT PRESIDENT FOR 1939

During the brief business meeting preceding the distribution of prizes, the following officers for 1939 were elected: President, Dr. John F. Wright, Toledo; first vice-president, Dr. F. T. Gallagher, Cleveland; second vice-president, Dr. E. C. Yingling, Lima, third vice-president, Dr. D. C. Brennan, Akron; fourth vice-president, Dr. H. H. Dorr, Columbus; fifth vice-president, Dr. Valloyd Adair, Lorain; secretary-treasurer, Mr. Geo. P. Cooley, Executive Secretary, the Toledo Academy of Medicine.

The Columbus Committee on Arrangements for this year's tournament included: Dr. Roy J. Secrest, chairman, Drs. T. R. Fletcher, A. B. McConagha, Louis Mark, M. E. Millhon, M. B. Rusoff and H. E. Secrest.

Following is a record of the scores of the players participating in the tournament:

Player	1st Nine	2nd Nine	18 Holes
W. B. Morrison, Columbus	39	42	81
	41	38	79
F. T. Gallagher, Cleveland	41	42	83
	42	38	80
W. A. Neill, Toledo	51	51	102
	59	53	112
H. E. Wilkinson, Van Wert	45	47	92
	48	46	94
R. C. Young, Toledo	45	45	90
	48	42	90
T. Willis, Cleveland	46	36	82
	44	42	86
B. O'Brien, Cleveland	45	44	89
	44	41	85
J. Russo, Cleveland	51	47	98
	49	47	96
Chas. Lukens, Toledo	47	50	97
O. S. Steiner, Lima	56	55	111
	51	52	103
R. C. Obetz, Columbus	45	41	86
	46	46	92
E. C. Yingling, Lima	47	44	91
	43	46	89
C. M. Larrick, Columbus	44	47	91
W. P. Smith, Columbus	46	45	91
	39	47	86
J. P. Bolton, Columbus	52	48	100
D. R. Mathie, Newton Falls	50	45	95
	50	49	99
J. J. Harrison, Napoleon	40	41	81
	43	40	83
G. H. Lewis, Lakewood	57	52	109
	53	55	108
Theo. Miller, Cleveland	46	56	102
	52	48	100
S. T. Marshall, Dover	59	51	110
	52	58	110
M. W. Everhard, New Philadelphia	54	52	106
	48	57	105
G. R. Gardiner, Ashville	64	60	124
	57	53	110
F. W. Thomas, Columbus	54	53	107
B. G. Shaffer, Toledo	43	48	91
	44	47	91
A. P. Hancuff, Toledo	54	64	118
	52	49	101
J. E. Schrider, Toledo	46	46	92
	47	50	97
A. A. Brindley, Toledo	48	49	97
	49	47	96
Paul Hohly, Toledo	52	48	100
N. P. Stauffer, Killbuck	54	49	103
	48	52	100

Player	1st Nine	2nd Nine	18 Holes
S. J. Coulter, Toledo	54	45	99
D. E. Sauer, Marietta	45	42	87
	43	43	86
C. W. Hullinger, Springfield	46	44	90
	46	44	90
A. K. Howell, Springfield	43	47	90
	46	44	90
R. R. Richison, Springfield	48	45	93
	45	43	88
W. D. Beasley, Springfield	46	52	98
	53	51	104
W. D. Inglis, Columbus	47	45	92
	---	44	—
F. V. Boyle, Bowling Green	44	48	92
	---	46	—
D. Thomas, Lorain	48	47	95
	48	48	96
C. H. Frederick, Lorain	44	45	89
	49	46	95
J. S. Lewis, Youngstown	44	44	88
	44	45	89
R. P. Bell, Cleveland	44	45	89
	43	42	85
Wm. A. Welsh, Youngstown	42	37	79
	45	41	86
D. C. Brennan, Akron	44	46	90
	44	44	88
S. R. Fairchild, Columbus	61	59	120
W. E. Masters, Columbus	45	48	93
	51	43	94
F. M. Green, Columbus	43	48	91
	49	43	92
O. F. Rosenow, Columbus	42	49	91
	41	46	87
Louis Mark, Columbus	43	44	87
	42	40	82
H. E. Secrest, Columbus	46	48	94
	49	43	92
J. E. Talbot, Lima	45	50	95
	47	53	100
E. H. Hedges, Lima	51	54	105
	51	53	104
H. A. Thomas, Lima	60	54	114
	57	55	112
J. D. Fouts, Dayton	44	40	84
	43	45	88
M. R. Haley, Dayton	45	44	89
	48	46	94
W. W. Sauer, Marietta	44	45	89
	45	46	91
H. D. Emswiler, Columbus	51	47	98
A. J. Kirschner, Lorain	50	51	101
	49	45	94
R. L. Tecklenberg, Glandorf	49	50	99
	50	46	96
C. T. Grattidge, Laurelville	56	53	109
	53	49	102
H. H. Dorr, Columbus	53	49	102
	52	---	-----
T. R. Fletcher, Columbus	48	48	96
	49	---	—
M. B. Rusoff, Columbus	65	58	123
	56	---	-----
C. F. Wharton, Akron	44	48	92
	48	44	92

Player	1st Nine	2nd Nine	18 Holes
R. C. Mauger, Newark	46	51	97
	46	48	94
B. E. Ingmire, Plain City	53	53	106
	49	47	96
F. C. Callaway, Marysville	46	41	87
	49	43	92
A. K. Buell, Athens	43	44	87
	45	44	89
Jerome Zeigler, Cincinnati	44	45	89
	51	43	94
J. G. Anderson, Fayetteville	48	47	95
	45	45	90
C. S. Roof, Cincinnati	46	44	90
	47	44	91
W. R. Riddell, Jackson	49	41	90
	48	45	93
L. C. Bean, Gallipolis	46	46	92
	49	48	97
D. A. Gross, Hubbard	45	47	92
	48	46	94
D. E. Jones, Columbus	44	41	85
	44	44	88
G. R. Micklethwaite, Portsmouth	50	49	99
	47	50	97
L. D. Allard, Portsmouth	57	56	113
	59	49	108
C. L. Ferguson, Portsmouth	51	51	102
	51	51	102
I. P. Seiler, Piketon	53	49	102
	48	50	98
F. A. LeFevre, Cleveland	55	59	114
R. J. Secrest, Columbus	44	50	94
M. E. Millhon, Columbus	52	55	107
R. W. Nosker, Columbus	49	53	102
	53	53	106
R. A. Stack, Lorain	46	50	96
Valloyd Adair, Lorain	43	48	91
	48	46	94
G. M. Wilcoxon, Alliance	57	53	110
	58	53	111
L. M. Otis, Celina	45	45	90
	42	39	81
W. C. Scheidt, Celina	46	41	87
	42	42	84
P. D. Werum, Toledo	43	47	90
	42	49	91
H. L. Basinger, Lima	49	45	94
	48	52	100
J. R. Johnson, Lima	49	51	100
	58	52	110
L. C. Thomas, Lima	50	43	93
	51	45	96
W. A. Noble, Lima	60	53	113
	57	56	113
C. A. Hyer, Columbus	42	38	80
	41	44	85
J. B. Sampsell, Van Wert	45	47	92
	45	46	91
L. C. Neiswander, Ada	57	55	112
R. O. Ruch, Lima	41	44	85
	43	42	85
J. F. Wright, Toledo	50	51	101
N. J. Seybold, Toledo	50	46	96
	43	51	94

Player	1st Nine	2nd Nine	18 Holes
J. I. Collins, Toledo	43	47	90
	40	50	90
A. C. Smith, Wooster	47	49	96
	47	49	96
J. J. Marek, Cleveland	43	38	81
	45	42	87
T. H. Brown, Toledo	47	52	99
	51	47	98
F. L. Eyestone, Toledo	45	42	87
	46	41	87
G. F. Bowman, Toledo	44	42	86
	44	42	86
S. D. Zuker, Toledo	43	43	86
	43	42	85
T. F. Heatley, Toledo	48	45	93
	50	48	98
A. N. Wiseley, Lima	49	50	99
	49	51	100
W. E. Yingling, Lima	47	46	93
	43	42	85
D. R. Printz, Ada	43	40	83
	43	39	82
C. N. Sanders, Millfield	54	50	104
R. L. Barnes, Columbus	47	47	94
	49	46	95
M. R. Kellam, Cleveland	47	47	94
G. D. Kirk, Columbus	43	51	94
Robt. Kirk, Columbus	48	55	103
R. M. Knoble, Sandusky	63	57	120
H. F. Fulton, Columbus	47	46	93
J. D. Wilson, Columbus	53	50	103

New York Graduate Fortnight

The Eleventh Annual Graduate Fortnight of The New York Academy of Medicine will be held in New York City from October 24 to November 4. The subject of this year's course is: "Diseases of the Blood and Blood-Forming Organs". The program will include clinics and clinical demonstrations at many of the hospitals in New York City, evening addresses and appropriate exhibits. All members of the medical profession are eligible for registration. A complete program and registration blank can be secured by addressing Dr. Mahlon Ashford, 2 East 103d Street, New York City.

New Officers of Nurses' Association

Officers of The Ohio State Nurses' Association, elected at Dayton, April 16, for the ensuing year, are: President, Celia Cranz, R.N., Akron; first vice president, Cora M. Templeton, R.N., Cleveland; second vice president, Mrs. Helen S. Haughton, Columbus; secretary, Huldah M. Wyland, R.N., Toledo; treasurer, Sue Z. McCracken, Lakewood; trustees, Catherine Buckley, R.N., Cincinnati; Gladys Hardin, R.N., Lima. Holdover trustees are: Mrs. Nan H. Ewing, R.N., Toledo, and Mrs. Esther B. Brubaker, R.N., Springfield.

COMING MEETINGS

American Medical Association, San Francisco, June 13-17.

American Academy of Pediatrics, Del Monte, Calif., June 9-11.

American Academy of Tuberculosis Physicians, San Francisco, June 17-18.

American Association of Individual Physicians and Surgeons, Chicago, June 6-9.

American College of Surgeons, New York, Oct. 17-21.

American Dermatological Association, Del Monte, Calif., June 9-11.

American Heart Association, San Francisco, June 10-11.

American Medical Women's Association, San Francisco, June 12-14.

American Ophthalmological Society, San Francisco, June 9-11.

American Pediatric Society, Bolton Landing, N. Y., June 9-11.

American Proctologic Society, San Francisco, June 11-13.

American Psychiatric Association, San Francisco, June 6-10.

American Public Health Association, Kansas City, October 25-28.

American Radium Society, San Francisco, June 13-14.

American Rheumatism Association, San Francisco, June 13.

American Society of Clinical Pathologists, San Francisco, June 9-11.

American Urological Association, Quebec, Canada, June 27-30.

Association for the Study of Allergy, San Francisco, June 9-10.

Association for the Study of Internal Secretions, San Francisco, June 13-14.

Association of Military Surgeons of the United States and Canada, Rochester, Minn., Oct. 13-15.

National Tuberculosis Association, Los Angeles, June 20-23.

Tribute Paid To Dr. E. D. Moore

Thirty members of the Tuscarawas County Medical Society honored Dr. E. D. Moore, veteran New Philadelphia physician, April 14 on his completion of 50 years of active practice. Dr. Moore's service to the public and the profession was lauded by Dr. G. I. Goodrich, Dover, and Dr. James A. McCollam, Uhrichsville. A scientific program was presented by Dr. Verne A. Dodd, professor of surgery, Ohio State University College of Medicine, who spoke on "Fractures of the Femur".

LARGE NUMBER OF OHIO PHYSICIANS WILL TAKE PROMINENT PART IN A.M.A. SESSION, SAN FRANCISCO, JUNE 13-17

HEADED by Dr. J. H. J. Upham, Columbus, President of the American Medical Association, Dr. Barney J. Hein, Toledo, President of the Ohio State Medical Association, and Dr. John B. Alcorn, Columbus, Past-President of the State Medical Association, a large delegation of Ohio physicians is scheduled to take a prominent part in the Eighty-Ninth Annual Session of the American Medical Association at San Francisco, June 13-17, 1938.

The meeting will open with a session of the House of Delegates at 10 A.M., Monday, June 13, in the Empire Room of the Hotel Sir Francis Drake.

General scientific meetings will be held Monday morning and all day Tuesday.

The Scientific Assembly will be officially opened with a general meeting Tuesday evening, June 14, at the Opera House, at which Dr. Upham will preside and Dr. Irvin Abell, Louisville, Ky., will be installed as President of the American Medical Association.

Section meetings will be held Wednesday, Thursday and Friday, June 15, 16 and 17.

The following sections will convene at 9 A.M. each day: Surgery, General and Abdominal; Ophthalmology; Pediatrics; Pharmacology and Therapeutics; Nervous and Mental Diseases; Dermatology and Syphilology; Gastro-Enterology and Proctology, and Radiology.

Those sections convening at 2:00 P.M. each day are: Practice of Medicine; Obstetrics and Gynecology; Laryngology, Otology and Rhinology; Pathology and Physiology; Preventive and Industrial Medicine and Public Health; Urology, and Orthopedic Surgery.

General Headquarters, Scientific Exhibit, Registration Bureau, Technical Exhibits, Information Bureau and Branch Postoffice will be located in the Civic Auditorium.

Scientific meetings will be held in various buildings in San Francisco's Civic Center.

A complete program of the A.M.A. meeting, data concerning hotel accommodations, with a description of San Francisco and its facilities for entertainment and amusement, appear in the May 7, issue of *The Journal of the American Medical Association.*

Representatives of the Ohio State Medical Association in the House of Delegates of the American Medical Association will be: Dr. G. F. Zinninger, Canton; Dr. John B. Alcorn, Columbus; Dr. Ben R. McClellan, Xenia; Dr. Carl R. Steinke, Akron; Dr. E. R. Brush, Zanesville; Dr. C. E. Kiely, Cincinnati, and Dr. C. W. Waggoner, Toledo.

Dr. Clyde L. Cummer, Cleveland, member of the A.M.A. Committee on Scientific Assembly, will represent the Section on Dermatology and Syphilology in the House of Delegates.

Other Ohio physicians who will participate in the business activities of the meeting as members of official agencies of important standing committees of the A.M.A. are: Dr. Geo. Edw. Follansbee, Cleveland, chairman of the Judicial Council; Dr. Torald Sollman, Cleveland, chairman, and Dr. H. N. Cole, Cleveland, member of the Council on Pharmacy and Chemistry; Dr. Howard T. Karsner, Cleveland, member of the Council on Physical Therapy.

The following Ohio physicians are officers of scientific sections: Dr. Derrick Vail, Cincinnati, secretary of the Section on Ophthalmology; Dr. Russell L. Haden, Cleveland, chairman of the Section on Pharmacology and Therapeutics; and Dr. John T. Murphy, Toledo, secretary of the Section on Radiology.

Ohio physicians who are scheduled to take part in the San Francisco session as essayists are: Dr. Walter M. Simpson, Dayton; Dr. M. A. Blankenhorn, Dr. A. Graeme Mitchell and Dr. Samuel Goldblatt, Cincinnati; Dr. Roy W. Scott, Dr. John E. L. Keyes, Dr. Harry Goldblatt, Dr. Russell L. Haden, Dr. W. J. Gardner, Dr. Torald Sollman, Dr. Harold N. Cole, Dr. Katharine I. Henderson, Dr. Garrett A. Cooper, Dr. W. R. Love, Dr. W. F. Schwartz, Dr. Walter G. Stern, Dr. Thomas E. Jones, Dr. E. Perry McCullagh, Cleveland; Dr. E. G. Galbraith, Dr. Henry A. Brunsting, and Dr. Barney J. Hein, Toledo. Discussants include: Dr. Albert D. Ruedemann, Dr. W. B. Chamberlin, Dr. Milton B. Cohen, Dr. O. P. Kimball, Dr. John E. Rauschkolb and Dr. Haden, Cleveland.

Physicians participating in the Scientific Exhibit include the following from Ohio: Dr. Bernhard Steinberg, Toledo; Dr. John E. L. Keyes, Dr. Harry Goldblatt, Dr. William Stevenson, and Dr. B. S. Kline, Cleveland.

Representative to the Scientific Exhibit from the Section on Preventive and Industrial Medicine and Public Health is Dr. Paul A. Davis, Akron.

Features of the meeting include a symposium on Health Problems in Education, which will be held in the City Health Building, Civic Center, Tuesday, June 14, at 2:00 P.M.; a special exhibit on anesthesia and a special exhibit on fractures. Each of these exhibits will present demonstrations continuously throughout the week.

Members of the House of Delegates and officers of the American Medical Association will be entertained at a dinner, Monday evening, June 13,

at the Palace Hotel, and at a luncheon Tuesday noon, June 14, at the Hotel Sir Francis Drake.

The President of the American Medical Association will be honored with a reception and ball to be held Thursday evening, June 16, at the Palace Hotel.

Alumni, group and fraternity dinners are scheduled for various days during the meeting. (See pages 1576-1577, May 7 issue, *The Journal of the A.M.A.*)

The American Medical Golfing Association will hold its twenty-fourth annual tournament at the San Francisco Golf and Country Club, Monday, June 13.

Many of the Ohio physicians planning to attend the Eighty-Ninth Annual Meeting of the American Medical Association have already made reservations for themselves and families on the Ohio State Medical Association's special train to San Francisco, leaving Chicago June 7 and returning June 24. Requests for space should be addressed to Charles S. Nelson, Executive Secretary, 1005 Hartman Theater Building, Columbus, Ohio.

Medical Students to Receive New Booklets on Tuberculosis

Two booklets on tuberculosis, one for the patient and the other for the "doctor of the future", will be made available soon by the National Tuberculosis Association through the Ohio Public Health Association to the 90 senior medical students at the Ohio State University, Columbus; 66 at the Western Reserve University, Cleveland; and 72 at the University of Cincinnati. Dr. Kendall Emerson, managing director of the National Association, has announced that this is part of the service of the tuberculosis groups to carry on their educational activities among the physicians, as well as among the general public.

"To the credit of the American doctor", the booklet for students says, "the record shows that he has from the beginning of the organized fight against tuberculosis generously joined hands with the non-medical crusader, fully agreeing with him that tuberculosis is not merely a disease of certain tissues but a social problem of first magnitude. This fine record should forever silence the criticism that doctors' interests are too narrowly limited to sick organs."

In its message to the students, the National Tuberculosis Association says, "The hope of eradicating tuberculosis lies in the hands of the doctors of tomorrow."

"What You Should Know About Tuberculosis" is the title of the booklet written for the patient. It is an interpretative booklet, offered as an aid to the physician in guiding his patient. Its tone is optimistic and the language is simple.

CLOTHING SUGGESTIONS FOR THOSE GOING TO A.M.A. MEETING

San Francisco—Light Spring clothing; top coats. Summer clothing not advisable. Temperature in June varies between 50 and 70 degrees. Afternoons and nights are cool.

Los Angeles—Summer clothing advisable. June temperature varies between 70 and 80 degrees. Nights are cool.

Northern California—Temperature comparable to June in Middle West or East.

Coast South of San Francisco—Temperature ranges from 10 to 20 degrees higher than in San Francisco.

Southwest States En Route—Temperature slightly warmer than June in Middle Western states.

Northwest Parks and Mountains—Medium-weight clothing, top coats, advisable.

Win Public Health Awards

Cleveland was given an award in Class I, for cities of over 500,000 population, in the Ninth Annual City Health Conservation Contest for 1937 conducted by the Chamber of Commerce of the United States in cooperation with the American Public Health Association.

Awards are given, in each of six population groups, to those competing cities, which in the opinion of a committee of health experts, have during the past year dealt most effectively with their local health problems. Health department programs alone are not used as a basis for the awards, but rather the community efforts of all agencies and groups including the work of private practitioners of medicine and dentistry.

Richland County, Ohio, was given an award of merit in the Northeastern Division, in the Fourth Annual Rural Health Conservation Contest, under the same auspices.

Course in Electrocardiography

An intensive two weeks' course in electrocardiography for graduate physicians will be given at Michael Reese Hospital, Chicago, from August 22 to September 3, 1938, inclusive, by Dr. Louis N. Katz, director of cardiovascular research at the hospital. The class will be limited in number. A copy of the program and further information is available upon request to the Medical Librarian, Michael Reese Hospital, 29th and Ellis Avenue, Chicago, Ill.

Do You Know - - -

Dr. J. H. J. Upham, Columbus, was absent from the Ninety-second Annual Meeting of the Ohio State Medical Association—the first State meeting of the Association he has missed in many years—because of conflicting engagements as guest speaker at the annual meetings of the Texas and Kansas State Medical Societies.

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Dr. H. V. Dutrow, Dayton, candidate for the Republican nomination for State Senator from the Third District, gave a radio talk on "Socialized Medicine", Wednesday, April 27, over station WHIO, Dayton.

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Laws levying annual occupational taxes on practitioners of the healing art were enacted in Alabama, Delaware,Florida and North Carolina last year.

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Dr. Howard E. Jones, Circleville, reviewed the facts of Indian lore in "The Ohio Gateway", a new book by D. E. Cruise, Kingston, a worthwhile graphic presentation of the earlier history of Ohio.

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Dr. George D. Woodward, psychiatrist on the staff of the Columbus State Hospital, has been transferred to a similar capacity at the Ohio Penitentiary.

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An interesting article entitled "Endocrinology and the Understanding and Treatment of the Exceptional Child," by Dr. Louis A. Lurie, Cincinnati, director of the Child Guidance Home and Assistant Professor of Psychiatry, University of Cincinnati College of Medicine, appeared in the May 7, 1938, issue of *The Journal of the American Medical Association*, pages 1531-1536.

* * *

Public and parochial school authorities throughout Illinois are being asked to require the vaccination of teachers as a condition of employment and to urge on parents the vaccination of all children on entering school for the first time, in accordance with a new policy recently adopted by the State Department of Health.

* * *

A joint meeting of the Obstetrical and Gynecological Section of the Cleveland Academy of Medicine and the Obstetrical and Gynecological Society of Allegheny County was held at Pittsburgh, Monday, April 4. Cleveland physicians who participated in the program were: Dr. Scott C. Runnels, Dr. A. J. Skeel and Dr. Robert L. Faulkner.

A considerable increase in fatalities among youthful cyclists is noted in a recent issue of the statistical bulletin of the Metropolitan Life Insurance Company. Deaths resulting from collisions of automobiles with bicycles in 1936 and 1937 were double the number of the preceding year. The estimated number of fatalities of this type in the United States is 700 in 1936 and 1937, compared with 350 in 1935.

* * *

The following special committees to conduct studies have been appointed by the Council and the Board of Directors of the Cleveland Academy of Medicine; "Practice of Medicine by Hospitals", Dr. Milton Cohen, Dr. H. L. Farmer and Dr. Clarence H. Kuhlman; "The Relation of Specialties to the Organic Structure of the Academy", Dr. R. S. Dinsmore, chairman, Dr. J. E. Tuckerman, Dr. Paul Moore and Dr. J. T. Collins.

* * *

The Legislature of the State of New York recently enacted a bill to prohibit advertising by physicians for patronage "by means of hand-bills, posters, circulars, letters, stereoptical slides, motion pictures, radio, or magazines". The bill was sponsored by the State Medical Society.

* * *

On invitation of the Toledo Academy of Medicine, Dr. Carl E. Buck, field director of the American Public Health Association, has been conducting a public health survey of Toledo. The object of the study is to determine the extent to which Toledo agencies are providing adequate health protection service, and to recommend means by which the activities of the various agencies may be coordinated and the program improved.

* * *

There are 198 city and county health districts in Ohio. Of these 87, or approximately 44 per cent have full-time health commissioners, while 111, approximately 56 per cent, are directed on a part-time basis.

* * *

Dr. Dennis J. Murphy, superintendent of the U. S. Veterans' Hospital at Chillicothe, and Dr. Harry Botts, superintendent of the Marion Indiana, Veterans' Hospital, exchanged positions on April 16. Dr. Murphy had been head of the institution at Chillicothe since January 29, 1934.

* * *

In his book "Your Diet and Your Health", Dr. Morris Fishbein, estimates that the average person in a life of 70 years consumes 200,000 pounds of food.

WHAT THE A.M.A. IS DOING FOR YOU AND THE PROFESSION AS A WHOLE REVEALED IN REPORTS OF ITS OFFICIALS

THE annual reports of officers and committees of the American Medical Association, as published in the April 30, 1938, issue of *The Journal of the A.M.A.*, pages 1447-1490, are worthy of careful reading by every Ohio physician, particularly those who wonder what the parent organization is doing for the medical profession. An hour or two of careful perusal of these reports should impress any reader with the magnitude of the activities of the A.M.A. in behalf of not only its members, but of the public generally. Important excerpts from some of the reports follow:

MEMBERSHIP AND FELLOWSHIP

On April 1, 1938, membership in the American Medical Association, 109,435, was the largest in its history. Membership on the same date last year was 105,460. The number of Fellows of the A.M.A. was 68,479, also a record, compared with 66,296 on April 1, 1937. It is estimated that from 75 to 80 per cent of the total number of eligible physicians engaged in private practice are recorded as members of their state medical associations and consequently are members of the A.M.A. Every member of the A.M.A. is eligible for fellowship by making application and paying $7 per year. Benefits of fellowship include a subscription to *The Journal of the A.M.A.*

BUSINESS OPERATIONS

Gross earnings for the year ended December 31, 1937, amounted to $1,654,203.74. Operating expenses were $982,830.10, including $241,663.85 for paper stock. Association expenses including expenditures in connection with the operations of councils, bureaus and departments, amounted to $431,635.63. Building expenses and depreciation, fuel, legal services and cost of sundry publications amounted to $218,601.19. Net income for the year was $122,242.92, of which sum $83,563.74 represented income from investments, so that the actual net operating income was $38,679.18. Number of employes at the time of the preparation of the report of the Board of Trustees was 616.

THE JOURNAL OF THE A.M.A.

Circulation of *The Journal of the A.M.A.* was 97,750 on January 1, 1938. Ohio physicians on the mailing list on that date numbered 4,989, of whom 3,406 were Fellows and 1,583 subscribers.

The department devoted to "Queries and Minor Notes" is an important feature of *The Journal.* Approximately 5,000 questions are submitted by physicians each year. These questions cover a wide range of subjects. Most of them are answered by members of the official staff of the Association, and about 20 per cent are referred for reply to physicians recognized as authorities in the fields concerned. It is interesting to note that approximately 40 per cent of such inquiries come from physicians in communities where adequate library facilities are available and the remainder from physicians in communities without opportunities for such consultation.

SPECIAL JOURNALS

While the total circulation of special scientific journals was larger in 1937 than in any previous year, the increase was not as large as would be fully justified by the quality of the scientific material presented. New publications in the same fields as those covered by some of the special journals have been established within the last few years as the official organs of special societies. The loss incurred through the publication of the special journals in 1937 was $25,957.37, as compared with a loss of $33,821.30 in 1936. Only two of the journals produced incomes larger than production costs. While there is a limit beyond which, in the opinion of the Board of Trustees, it would not be wise to go in the continued absorption of yearly losses from the publication of the special journals, the Board feels that these publications constitute a distinct contribution to scientific medical literature and that the cost involved is fully justified by that fact.

LIBRARY AND INDEX MEDICUS

Throughout the country, the Library of the American Medical Association has come to be recognized as one of its greatest assets and as one of the chief facilities for rendering to the medical profession a service of the utmost importance in relationship to graduate medical education and the practical application of medical care. Services of the Library include the compilation and editing of the Quarterly Cumulative Index Medicus, the package library service, the periodical loan service, the indexing of *The Journal* and the usual services rendered by a reference library. More than 3,000 library packages were distributed during the year and nearly 11,000 periodicals were lent to physicians through the periodical loan service. The Library answered more than 6,000 general reference questions and more than 1,200 physicians called in person during 1937 to obtain the services of the department. More than 1,400 periodicals are regularly received in the Library and are available for indexing and for reference purposes.

MAILING AND ORDER DEPARTMENT

The total number of orders passing through the Order Department in 1937 was 68,282, and the

total number of units distributed as a result of these orders was 474,483. The greatest demand was for material issued through the Bureau of Health and Public Instruction and the next greatest demand was for material prepared by the Bureau of Medical Economics. In handling the orders referred to nearly 6,000 mail bags were used with a total weight of 174 tons.

Slightly less than 400,000 pieces of first class mail and more than 100,000 pieces of third class mail passed through the mailing department of the A.M.A. in 1937.

COUNCIL ON PHARMACY AND CHEMISTRY

The year 1937 was one of the busiest in the history of the Council of Pharmacy and Chemistry. The Elixir of Sulfanilamide-Massengill episode caused greater interest in the Council's activities and in increasing its work. Publications of the Council include: New and Nonofficial Remedies, Epitome of the U. S. Pharmacoepia and National Formulary; Useful Drugs; Glandular Physiology and Therapy and the A.M.A. Interns' Manual.

The difficult problem at present is how the executive force at headquarters can take care of increasing demands on the Council, not only in passing on drugs but in requests for advice and information from physicians in active practice.

Pointing out that representatives of a few firms whose method of doing business cannot receive recognition by the Council have in some instances made untrue representations to the effect that the Council charges a fee for examining drugs or that it "costs too much" to get a product passed by the Council or that it is necessary to take out so much advertising in *The Journal* before the Council will accept a product, the Board of Trustees made the following statement:

"Of course such statements are completely false. It has been reiterated again and again that since its inception the Council has never accepted, or permitted to be accepted, a cent of remuneration in any form for the consideration of products. The cost of the Council on Pharmacy and Chemistry, as well as that of other councils, is borne entirely by the Board of Trustees of the American Medical Association. The Council is not influenced in the slightest by any proffer of advertising patronage and, if it knows of such a proffer, the firm is notified it will have no effect on the Council's consideration. All members of the Council, with the exception of the Secretary, serve without remuneration. They give of their time willingly and unstintingly. As an expression of appreciation of their efforts, it is asked that the profession evaluate critically the Council's conclusions and lend support to its work in rationalizing therapeutics. If any unfair charges against the Council reach the ears of members of the profession, they should demand immediately that such charges be either substantiated or retracted."

COUNCIL ON PHYSICAL THERAPY

The principal achievements of the Council on Physical Therapy during the past year have been the establishment of standards for acceptable audiometers, the investigation of hearing aids, the examination of short wave diathermy apparatus and the advancement of the Council's educational activities with a wider distribution of information on physical therapy.

COUNCIL ON FOODS

The efforts of the Council on Foods to promote truthful advertising of wholesome food products and to develop scientific progress in the field of nutrition have been carried on intensively. There is a constantly increasing demand on the services of the Council and an earnest effort has been made to meet the demands as fully as possible.

The Council has published general reports on a number of subjects, including vitamin D; dextrose; nutritional significance of soft curd milks; dietary significance of fruit juices; use of apple or preparation of the apple in treatment of diarrhea in infants and small children; merit of spinach as a food; Vitamin D milk.

THE CHEMICAL LABORATORY

An important accomplishment of the Chemical Laboratory in the past year resulted from investigations of the poisonous effects of a product known as "Elixir of Sulfanilamide". The investigations were made with the aid of the scientific staff of the University of Chicago, of members of the Food and Drug Administration of the U. S. Department of Agriculture, and of individual physicians. It was clearly established that at least 76 deaths were due to the use of this product and the toxic agent involved was diethylene glycol.

COUNCIL ON INDUSTRIAL HEALTH

The Council on Industrial Health, organized in December, 1937, has held two official meetings and has developed a working organization through the appointment of a secretary and the creation of official committees. Articles dealing with various subjects of major importance in the field of industrial medicine are in course of preparation for publication. The Council has adopted official rules and is proceeding as rapidly as possible, with due conservatism, toward the prosecution of plans that have been officially adopted.

BUREAU OF LEGAL MEDICINE AND LEGISLATION

Federal and state legislation, malpractice, social security and income taxes, are the principal topics discussed in the comprehensive report of the Board of Trustees on the activities of the Bureau of Legal Medicine and Legislation.

Measures now pending in the U. S. Congress include five proposals contemplating either a federal investigation concerning health insurance

or the enactment of definite schemes for the establishment of health insurance; establishment of a United States Postgraduate Medical and Surgical College to provide not only postgraduate courses in medicine but also medical and surgical services for persons whose annual incomes are not in excess of $1,000; investigation of the activities of the American Medical Association and of state and county medical associations in connection with Group Health Association, Inc.; federal subsidies to aid the states in general health activities, in the medical care of transients and in the control of venereal diseases and tuberculosis; several food and drug control bills, and a number of reorganization proposals contemplating the creation of a Department of Welfare in which will be grouped the health activities of the government.

BUREAU OF HEALTH AND PUBLIC INSTRUCTION

The work of the Bureau of Health and Public Instruction has proceeded along established lines but reached a high peak in 1937. The dramatized radio program conducted with the cooperation of the National Broadcasting Company completed its second successful season in 1937. The Director of the Bureau, served as a member of official committees of a number of important lay organizations, including the National Congress of Parents and Teachers, the General Federation of Women's Clubs, the 4-H clubs, the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, the Children's Bureau of the U. S. Department of Labor. Members of the staff of the Bureau made many public addresses during the year, and the educational publications issued under the direction of the Bureau have been widely distributed. The Bureau, cooperated as in former years, with the Bureau of Exhibits in the preparation of exhibit material.

BUREAU OF MEDICAL ECONOMICS

Among the very important subjects discussed in that part of the report relating to the Bureau of Medical Economics, are the following: Study of medical care by the American Medical Association and its component societies: new forms of medical care; contract and corporation practice; Group Health Association, Inc.; group hospitalization; expansion of hospital functions; mechanical aids in medical practice; present tendencies toward the practice of medicine by hospitals; workmen's compensation; insurance medical directories.

The cooperation of every physician is earnestly requested in the A.M.A. survey of medical care, so that the determination of the actual needs for medical services in every county in the United States may be determined, and preferable procedures recommended to meet that need.

The report stated that two proposals have been suggested as a solution to the problem of medical services in group hospitalization contracts: (1) restrict the benefits of the contract exclusively to the use of hospital facilities such as bed and board, operating room, medicines, surgical dressings and general nursing care; and (2) pay cash benefits directly to the insured for all medical services.

Pointing out that there is need for the House of Delegates to adopt a standard for medical practice in hospitals which will permit the constant improvement of medical services, the Board expressed the opinion that the years of work spent in raising the standards of medical education will be nullified if hospital corporations and associations are permitted to sell medical services to patients by employing lay persons, nurses and technicians to render certain medical services under the tacit supervision of salaried physicians.

Calling attention to the resolution adopted by the House of Delegates in 1936 condemning the listing of a physician's name for a fee in a directory which indicates his specialty and his availability for insurance and compensation work and other professional services, the Bureau of Medical Economics stated that as a result of a survey of 220 insurance companies in the United States and Canada, representing all sizes and types of companies, it was conclusively proven that insurance medical directories are not used in the selection of insurance examiners. Still many physicians are being victimized by publishers of "pay-as-you-enter" insurance medical directories.

As measured by the volume of correspondence handled by the Bureau, the most interest was shown in group hospitalization plans; insurance companies; contract practice plans; socialized medicine and workmen's compensation. A noticeable subsidence of concern over health insurance occurred.

BUREAU OF INVESTIGATION

The work of the Bureau of Investigation has been continued along the usual lines. From ten to twelve thousand direct communications are answered each year. There is a constant increase in the number of inquiries received from laymen. The demand for pamphlets and leaflets pertaining to frauds in medicine and to quackery was fully sustained during the year. The Bureau has continued its cooperation with medical societies and other professional groups and with various official agencies of federal, state and local governments.

BUREAU OF EXHIBITS

The Scientific Exhibit at the Atlantic City session was the largest that has been shown, with 254 exhibits—one exhibit for each 38 Fellows registered. Association exhibits, dealing with activities of the American Medical Association, were sent out on 115 occasions to 33 states. There

were 40 medical and scientific meetings and 75 expositions and fairs for the public. Approximately 3,500,000 persons were reached by such means, including the Cleveland and Dallas expositions.

JUDICIAL COUNCIL

One item in the report of the Judicial Council on the subject "Physicians and Cultists" is very timely, and merits quotation in full:

"Many inquiries concerning the relations of the various cults to the regular profession have been received. The inquiries pertain particularly to the osteopath and the optometrist. Some of our members are giving lectures in osteopathic and optometric schools and addresses before their societies. Some members are associated by a common waiting room in offices with them. Some members are by mutual agreement professional associates principally in the field of surgery. There are some instances of partnership in practice. All of these voluntarily associated activities are unethical. Such relations certainly do not 'uphold the dignity and honor of (our) vocation' or 'exalt its standards.' In case of emergency no doctor should refuse a sufferer knowledge or skill which he possesses to the sufferer's harm but this is quite a different matter from that of a consultant or practitioner who by consulting or practicing with him assists a cultist to establish himself as competent and on the same basis of medical knowledge as a doctor of medicine. By the very nature of the education and training of each, a consultation with a cultist is a futile gesture if the cultist is assumed to have the same high grade of knowledge, training and experience as is possessed by the doctor of medicine. Such consultation lowers the honor and dignity of the profession in the same degree to which it elevates the honor and dignity of the irregular in training and practice. Practicing as a partner or otherwise has the same effect and objection. Teaching in cultist schools and addressing cultist societies is even more reprehensible, for such activities give public approval by the medical profession to a system of healing known to the profession to be substandard, incorrect and harmful to the people because of its deficiencies. There hardly can be a voluntary relationship between a doctor of medicine and a cultist which is ethical in character."

A widespread practice of renting radium for the treatment of patients by physicians not owning or being experienced in the use of radium has caused considerable discussion during the past year. As a result of a rather extensive correspondence both from those favoring such use of radium and those opposed, the Judicial Council is of the opinion that the prescribing and directing of its use in the case of a patient whom the prescriber has not examined or seen is an unethical procedure.

Columbus—Dr. Jonathan Forman spoke on "Health and Social Security", at recent meetings of the Knights of Columbus Luncheon Club and the Metal Trade Executives Association.

Don't Forget! July 1 is the deadline for registration with your District Collector of Internal Revenue for your permit to prescribe or dispense narcotic drugs. See May, 1938, issue, The Ohio State Medical Journal, pages 578-580 for details.

Obstetrics Board Plans Exams

The American Board of Obstetrics and Gynecology has announced that the oral, clinical, and pathological examinations for Group A and Group B applicants will be held in San Francisco, California, on Monday and Tuesday, June 13 and 14, 1938.

An informal dinner for the diplomates of this board, their wives and others interested in the work of the board, will be held at the Palace Hotel, San Francisco, on Wednesday evening, June 15, 1938, at 7 o'clock. Dr. William D. Cutter, Secretary of the Council on Medical Education and Hospitals of the American Medical Association, will address the group, and the successful candidates of the preceding two days' examinations will be introduced in person. Tickets, at $2.25 each, may be obtained in advance from Dr. Joseph L. Baer, 104 S. Michigan Avenue, Chicago, Illinois, or at the door. Reservations should be made in advance if possible.

Application blanks and booklets of information may be obtained from Dr. Paul Titus, secretary, 1015 Highland Building, Pittsburgh (6), Pa.

Endowment for Postgraduate Talks

Dr. Wiliam E. Lower, Cleveland, President of the Ohio State Medical Association in 1915, has made a gift to the Cleveland Academy of Medicine, which will yield an income of $250 a year for endowment of a lectureship. The endowment has been named by the Board of Directors as the "William E. Lower Fund", and it is the hope of the Board that the lectureship may provide the nucleus, eventually, for an endowed annual postgraduate course.

Eclectic Society Names Officers

The following officers were named by the Ohio State Eclectic Medical Association at its 74th Annual Meeting in Columbus, May 4: Dr. M. M. Brubaker, Troy, president; Dr. W. H. Gaskins, New Richmond, president-elect; Dr. F. L. Thomas, Marion, vice president; Dr. G. E. DeMuth, Sherwood, treasurer; and Dr. G. E. Jones, Lima, corresponding secretary.

IN MEMORIAM

Charles A. Bolich, M.D., Wadsworth; Cleveland College of Physicians and Surgeons, 1897; aged 66; member of the Ohio State Medical Association and the American Medical Association; died April 23. A past-president of the Medina County Medical Society, Dr. Bolich practiced in Wadsworth for 39 years. He served in the Ohio National Guard for 25 years, and was on duty at the Mexican border in 1916, as captain in command of Company G of the old Eighth Regiment. Dr. Bolich was a member of the Masonic Order and a charter member and past-president of the Wadsworth Lions Club. His widow, a daughter and two sons survive.

George W. Chabot, M.D., Peebles; Miami Medical College, Cincinnati, 1886; aged 76; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 19. Dr. Chabot practiced in Peebles for the last 20 years, having previously been located in Otway and Portsmouth for 32 years. Dr. Chabot was a member of the staff of Mercy Hospital, Portsmouth, and a member of the Board of Public Affairs at Peebles, the Masonic Order, Lions Club, and Knights of Pythias. Dr. Chabot was a charter member of the Hempstead Academy of Medicine of Scioto County. His widow, two daughters, a stepson and a sister survive.

Courtland William Dawe, M.D., Forest Hills, N. Y.; Cincinnati College of Medicine and Surgery, 1901; aged 57; died April 1. Dr. Dawe had practiced in Forest Hills for 20 years. He was formerly located in Cincinnati.

Joseph J. Gottlob, M.D., Cleveland; Cleveland College of Physicians and Surgeons, 1900; aged 69: Dr. Gottlob practiced in Cleveland for 35 years. He was a member of the Knights of Pythias. Surviving are his widow, a daughter, two brothers and two sisters.

Willard D. Haines, M D., Cincinnati; Medical College of Ohio, Cincinnati, 1884; aged 76; member of the Ohio State Medical Association, Fellow of the American Medical Association and the American College of Surgeons and member of the Western Surgical Association; died April 22, of a cerebral hemorrhage, while addressing a meeting of the Campbell County Medical Society at Ft. Thomas, Ky. Dr. Haines practiced in Cincinnati for over 50 years. He was professor of clinical surgery at the University of Cincinnati College of Medicine; editor of *The Journal of Medicine;* president of the Cincinnati Academy of Medicine in 1912, and treasurer of the Cincinnati Zoological Society. Dr. Haines served the unexpired term of Dr. Robert Carothers on the Council of the Ohio State Medical Association from 1921 to May 1922, and was delegate to the American Medical Association in 1920 and 1922, and from 1923 to 1927, inclusive. A member of the Masonic Order, Chamber of Commerce, and the Kiwanis Club, Dr. Haines took an active part in the civic and professional life of Cincinnati. His widow, a daughter, a sister and two brothers survive.

Warren Brown Keator, M.D., Findlay; Barnes Medical College, St. Louis, Mo., 1895; aged 72; member of the Ohio State Medical Association and the American Medical Association; died April 20. Dr. Keator first practiced medicine in Zanesville, later locating in Findlay where he was in active practice for 39 years. During the World War he was a lieutenant in the Medical Corps of the U. S. Army, and was stationed at Fort Benjamin Harrison, Ind., and Wilberforce University. Dr. Keator was a member of the Masonic order. His widow survives.

Jennings Meade King, III, Pittsburgh, Pa.; Western Reserve University School of Medicine, 1921; aged 40; member of the Pennsylvania State Medical Society and Fellow of the American Medical Association; member of the American Academy of Orthopedic Surgeons; died April 8. Dr. King began the practice of medicine in Leetonia, and later practiced in Wellsville, at which time he was a member of the Columbiana County Medical Society and the Ohio State Medical Association. For the past four years he had been located in Pittsburgh, where he was a member of the staff of West Penn Hospital and Children's Hospital. His father, the late Dr. J. M. King, was a former councilor from the Seventh District. Dr. King was a member of the Methodist Church, the American Legion and the Elks Lodge. His widow, a daughter, a son and a sister survive.

James Finley Leeper, M.D., McConnelsville; Starling Medical College, Columbus, 1878; aged 79; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 22. Dr. Leeper practiced in Rural Dale for 21 years and in McConnelsville for 38 years. He was a former member and president of the Morgan County Board of Health, and a member of the Masonic Order. Members of the Morgan County Medical Society were honorary pallbearers at Dr. Leeper's funeral. Surviving are his widow, a daughter, and a son, Dr. Clyde Leeper, Cleveland.

Cassies Minser, M.D., Webster; Cincinnati Medical College, licensed in 1897; aged 80; died April

23. Dr. Minser practiced in Darke County for nearly 50 years. His widow, a daughter and a sister survive.

James B. Nelson, M.D., Youngstown; University of Louisville School of Medicine, Louisville, Ky., 1911; aged 52; member of the Ohio State Medical Association, Fellow of the American Medical Association and Fellow of the American College of Surgeons; died May 7. The son of a physician, Dr. Nelson had practiced in Youngstown for 26 years. He was a former president of the Mahoning County Medical Society and was always active in the affairs of that society. Only recently Dr. Nelson was one of the speakers on the Ohio State Medical Association's Postgraduate Lecture Series at Chillicothe. He was a member of the Masonic Order. Surviving are his widow, a daughter and a brother.

Wesley Cornelius Redd, M.D., Youngstown; University of Pennsylvania School of Medicine, Philadelphia, Pa., 1917; aged 49; member of the Ohio State Medical Association and the American Medical Association; died April 16. Dr. Redd located in Youngstown after the World War, when he served as a lieutenant in the medisal transport corps of the U. S. Army. He was one of six Negro physicians in the city, and was an active member of the Mahoning County Medical Society. During 1937 he represented that society as correspondent for *The Ohio State Medical Journal.* Surviving are his widow, a daughter and two sons.

Franz Emory Solier, M.D., Bryan; Long Island College of Medicine, Brooklyn, 1907; aged 54; member of the Ohio State Medical Association and Fellow of the American Medical Association; died May 4. Dr. Solier practiced in Pioneer for a short time, and later located in Bryan where he was in active practice for 28 years. He served in the Medical Corps of the U. S. Army during the World War. Dr. Solier was active in the organization of the Orchard Hills Golf Club, and was its first president. He was a member of the American Legion and the Masonic Order. Surviving are his widow and two sons, one of whom—Dr. Richard Solier, was associated with his father in Bryan.

William Edgar Trego, M.D., Chagrin Falls; Chicago Homeopathic Medical College, 1894; aged 72; died March 27. Dr. Trego formerly practiced in Cleveland and for the past several years was located in Chagrin Falls. His widow and a daughter survive.

Toledo—In behalf of the Academy of Medicine of Toledo and Lucas County, Dr. L. D. Miller and Dr. Lewis R. Carr talked at the convocation hour of the University of Toledo recently, inaugurating the annual Health Week of the school.

Refresher Courses in Obstetrics and Pediatrics Scheduled During June

The following refresher courses have been scheduled by the Bureau of Child Hygiene, State Department of Health, during June.

June 2 — Ironton — Pediatrics. Speaker, Dr. Elmer G. Horton, professor of pediatrics, Ohio State University College of Medicine. Program consists of a clinic at Lawrence County General Hospital at 10:00 A. M., luncheon at Marting Hotel, at 12:45 P. M., lecture by Dr. Horton at 2:00 P. M., and informal discussion at 4:00 P. M. Included in the lecture will be such subjects as infant feeding; dysentery; infectious diseases and immunization; tuberculosis and syphilis in children, and differential diagnosis of meningitis.

June 3—Gallipolis—Pediatrics. Speaker, Dr. Horton. Program to be presented in the afternoon and evening will be similar to that given at Ironton.

June 15—Defiance—Obstetrics. Speaker, Dr. Charles E. Turner, Columbus. Meeting will be at the Defiance Country Club, beginning at 2:30 P. M., followed by dinner at 6 o'clock and round-table discussion. Topics: eclampsia, toxemias, forceps delivery, analgesics and hemorrhage.

June 16—Bowling Green—Obstetrics. Speaker, Dr. Andrews Rogers, Columbus, professor of obstetrics, Ohio State University College of Medicine. Meetings will be held from 2:00 to 5:00 P.M., and from 7:00 to 9:00 P.M.

Physicians residing in the vicinity of these cities are cordially invited by the State Department of Health to attend the refresher courses.

Offer $10,000 Scientific Award

More than $10,000 will be awarded in 1940 and similar prizes every seven years thereafter by the American Academy of Arts and Sciences, Boston, Mass. The prize is to be given "for outstanding work with reference to the alleviation or cure of diseases affecting the human genital organs". The award will be known as the Francis Amory Septennial Prize and is made in compliance with the requirements of a gift under the will of the late Francis Amory, Beverly, Mass. Further information may be obtained from the committee at 28 Newbury St., Boston, Mass.

Columbus—Dr. Carl V. Moore, assistant professor of medicine, Ohio State University College of Medicine, has received a fellowship from the American Society for. Experimental Pathologists to appear on the program of the International Physiological Congress, to be held in Zurich, Switzerland, August 14-18.

Dayton—"Social Hygiene" was the subject of a talk made by Dr. Karl W. Horn at a recent meeting at Epworth M. E. Church.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: L. H SCHRIVER, M.D., CINCINNATI)

HAMILTON

The Academy of Medicine of Cincinnati presented the following programs during May:

May 3—"The Relationship Between the Department of Health and the Private Practitioner", by Dr. Frank K. Harder; "The Physiology of the Electrocardiogram", by Dr. David I. Abramson; "A New Theory as to the Cause of Goitre", by Dr. Howard P. Fischbach.

May 10—"Silent Coronary Thrombosis With Complete Heart Block and Recovery", (A Case Report), by Dr. A. M. Wigser; "Why the High Mortality in Diabetic Coma?" by Dr. Louis B. Owens and Dr. Samuel S. Rockwern, with discussion by Dr. Marion A. Blankenhorn; "Gastro Photography", by Dr. Louis Sommer, with discussion by Dr. Sidney Lange.

May 17—"Wilms Tumor of the Kidney in an Adult", (A Case Report), by Dr. A. W. Nelson; "The Blood Serum Proteins in Health and Disease", by Dr. Howard W. Robinson, Ph.D., assistant professor of biochemistry, University of Cincinnati; "Nutritional Anemia in Infancy; Diagnosis, Treatment and Prophylaxis", by Dr. George M. Guest.

May 24—"Water Balance in Surgical Patients", by Dr. Frederick A. Coller, professor of surgery, University of Michigan Medical School, Ann Arbor, Mich.

May 31—Election Night and Annual Doctor's Frolic.—Bulletin.

WARREN

Dr. Louis H. Skimming, Middletown, discussed "The Uses of Digitalis", at a meeting of the Warren County Medical Society, Tuesday afternoon, May 3, in the Lebanon Town Hall.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

DARKE

A report of the recent meeting of the House of Delegates of the Ohio State Medical Association was given by Dr. C. I. Stephen, Ansonia, at a meeting of the Darke County Medical Society, Friday evening, May 20, in the Christian Church, Greenville. Following Dr. Stephen's report, a motion picture "Traumatic Surgery of the Extremities", photographed at the Yale University School of Medicine, was shown.—W. D. Bishop, M.D., secretary.

GREENE

Greene County Medical Society met at Xenia, May 5. Dr. H. F. Koppe, Dayton, spoke on "Management of the Menopause". Dr. Harold E. Ray, Xenia, discussed a case of "Torsion of the Testicle Within the Tunica Vaginalis". Dr. A. D. Ritenour, Jamestown, presented an interesting case of "Aortic Aneurysm". Dr. Paul D. Espey, Xenia, discussed two cases of menorrhagia which he treated successfully with congo red intravenously.—Donald C. Kyle, M.D., secretary.

MIAMI

At a meeting of the Miami County Medical Society, Friday afternoon, May 6, at Coates Inn, West Milton, Dr. Charles J. Shepard, Columbus, spoke on "Some Common Skin Troubles".—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

Members of the Hospital Staff presented a number of cases at a complimentary dinner meeting of the Montgomery County Medical Society Friday evening, May 6, at the National Military Home Hospital, Dayton.

At a meeting of the society, Friday evening, May 20, in the auditorium of the Fidelity Medical Building, Dr. R. K. Finley presented a paper on "Benign Lesion of the Breast", and Dr. R. C. Austin spoke on "Cancer of the Breast". Discussion was opened by Dr. Henry Snow and Dr. W. M. Simpson.

The next meeting will be held at the Miami Valley Golf Club, Friday evening, June 3.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

ALLEN

Dr. John B. Barnwell, associate professor of internal medicine, University of Michigan Medical School, Ann Arbor, Mich., spoke on "The Diagnosis of Symptomless Tuberculosis", at a meeting of the Academy of Medicine of Lima and Allen County, Thursday evening, April 21, at the District Tuberculosis Hospital, Lima.—News clipping.

MARION

The Marion Academy of Medicine held its regular monthly meeting Tuesday, May 3, at the Marion City Hospital. Dr. Edward P. Gillette, Toledo, spoke on "Methods of Fracture Treatments". Dr. O. P. Klotz, Councilor for the Third

District, was a guest at the meeting.—R. G. McMurray, M.D., secretary.

SENECA

The entire meeting of the Seneca County Medical Society, Thursday evening, May 19, at the Shawhan Hotel, Tiffin, was devoted to the consideration of miscellaneous business.—Edmund F. Ley, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

LUCAS

During the month of May, the following programs were presented by the Toledo Academy of Medicine:

May 6—Eye, Ear, Nose and Throat Section. "Ocular Senility as Seen With the Slitlamp, Including a Discussion of Senile Cataract", by Dr. Robert Von Der Heydt, associate professor of ophthalmology, Rush Medical College, Chicago, Ill.

May 13—Section of Pathology, Experimental Medicine and Bacteriology. "The Surgical Treatment of Pulmonary Tuberculosis", by Dr. Cameron Haight, assistant professor of surgery, University of Michigan Medical School.

May 20—Medical Section. "Artificial Pneumothorax Indications, Technique and Results", by Dr. Paul Holmes.

May 27—Surgical Section. "Oral and Plastic Surgery", by Dr. Claire LeRoy Straith, Detroit, Mich.—Bulletin.

PUTNAM

Dr. Karl D. Figley, Toledo, spoke on "Hay Fever and Asthma Due to Pollens", at a meeting of the Putnam County Medical Society, April 1, at the Hotel DuMont, Ottawa.—R. L. Tecklenberg, M.D., correspondent for *The Journal.*

SANDUSKY

At a meeting of the Sandusky County Medical Society, Thursday, April 28, at the Elmwood Rest Home, Green Springs, Dr. L. J. Herold, Toledo, discussed "Treatment of Common Ano-rectal Conditions", and Dr. N. W. Kaiser, Toledo State Hospital, spoke on "Insulin Treatment of Dementia Praecox".—T. R. Cunningham, M.D., secretary.

WOOD

The motion picture "Syphilis" produced by the American Medical Association and the United States Public Health Service, was presented at a meeting of the Wood County Medical Society, Thursday evening, April 21, at Pierce's Restaurant, Bowling Green.

Dr. H. F. Howe, Toledo, spoke on the subject "Diseases of the Stomach", at a meeting of the society, May 19.

Members of the society will be hosts to physicians of surrounding counties at a refresher course in obstetrics, Thursday, June 16, sponsored by the Bureau of Child Hygiene, State Department of Health. The speaker will be Dr. Andrews Rogers, Columbus, professor of obstetrics, Ohio State University College of Medicine.—R. N. Whitehead, M.D., secretary.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

ASHTABULA

Dr. Russell L. Haden, Cleveland, spoke on "The Nutritional Deficiency Diseases", at a meeting of the Ashtabula County Medical Society, Tuesday night, April 12, at the Broadway Inn, Geneva.—News clipping.

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during May:

May 4—Practice of Medicine Section. (Program Arranged by Mahoning County Medical Society). "Clinical Findings in and the Treatment of So-called Osteoporosis", by Dr. E. C. Baker, Youngstown; "Sickle Cell Anemia", by Dr. Charles H. Warnock, Youngstown; "Mercurial Diuretic Used to Relieve Interalveolar Edema with Dyspnea in Two Cases of Luetic Heart Disease", by Dr. John Noll, Youngstown.

May 6—Clinical and Pathological Section. "Stenosis of the Vagina", by Dr. Matthew Donahue; "Plastic Repair of the Thumb", by Dr. Donald Dial; "Dislocation of Elbow with Ruptured Brachial Artery", by Dr. D. S. Spreng; "Estimation of Disability Following Fractures and Dislocations", by Dr. Walter Stern; "Carcinoma of Thyroid with Metastasis", by Dr. N. C. Yarian and Dr. Jean Groh; "Eversion of Ascending Colon from Cecostomy", by Dr. H. G. Sloan; "Anal Fistula: Etiology and Treatment", by Dr. L. H. Brooks.

May 13—Joint Meeting Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "Neutralization of Vaccine Virus by Specific Immune Serum", by Dr. R. F. Parker; "The Role of Arterial Elasticity in Hemodynamics", by Dr. C. J. Wiggers; "The Effect of Thio-Bismol on Therapeutic Malaria", by Dr. W. F. Schwartz; "The Invivo Phosphatization of Richitic Bone in Monkeys", by Dr. H. J. Gerstenberger, Edna Chapman, M.A., Catharine Rose, M.S., and F. Beal; "The Difference Between P. U. and Coitus as Stimulus to Ovulation in the Rabbit", by Dr. B. B. Rubenstein; "A Survey of Mineral Levels During the Life Cycle of the Guinea Pig", by Dr. T. T. Zuck, D. R. L. Duncan, Ph.D., and Dorothy Hagemeyer, M.A.

May 20—Academy Annual Meeting. "Surgery of the Heart", (Surgical and Medical Aspects), by Dr. Claude S. Beck, associate professor of sur-

BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

IV. SEALING THE TIN CONTAINER

BRIEFLY, the method of food preservation commonly known as "canning" involves subjecting food in a permanently sealed container to a heat process. The heat process destroys spoilage organisms present on the raw food material; the seal on the container prevents reinfection of the food by such organisms. It is, therefore, obvious that the sealing operation—"closing" or "double-seaming" as it is known in the industry—is one of the most important in the canning procedure.

The manufacture of tinplate and "sanitary" cans is described elsewhere (1).

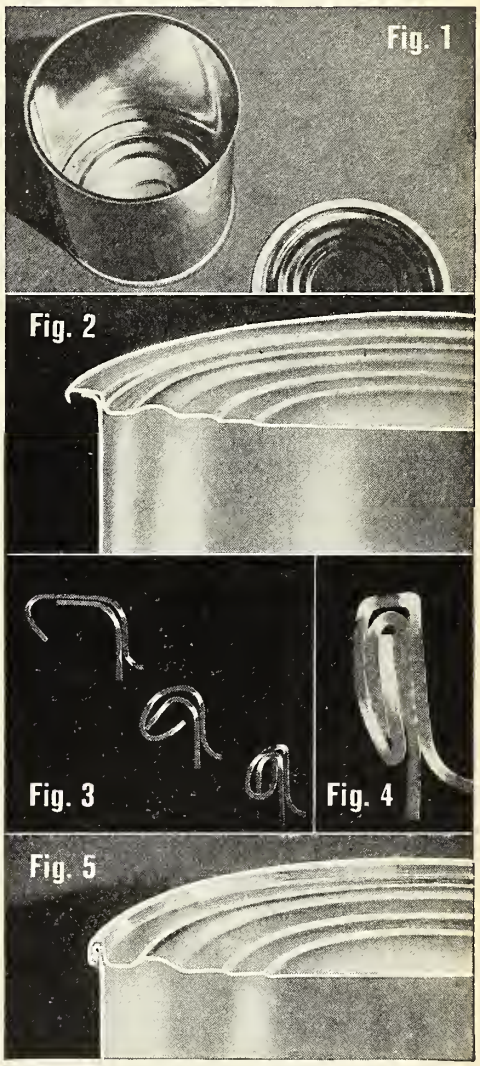
The open cans are received at the cannery in paper cartons or in washed paper-lined box cars, together with the covers which are contained in fiber shipping tubes. Figure 1 shows a can and end ready for use.

In modern canning practice, the cans are first conveyed by automatic runways to can washers, and thence to the filling tables or fillers where the correct amount of properly prepared raw food is put into the cans. The covers or "ends" are placed in the automatic sealing or "closing" machine to which the open can containing the food is mechanically conveyed. In this machine the ends are "double-seamed" onto the can. This operation is portrayed by the accompanying cross-sectional pictures.

In Figure 2 is shown the relation of can to cover before the sealing operation is started; note the relative position of the "curl" on the cover and the "flange" on the can. In this curl, the can manufacturer has placed a gasket or "compound," usually containing rubber. Figure 3 is a series of photographs illustrating the sealing operation in which the curl and flange are first rolled into position and then the layers of metal flattened together to form the final "double-seam" in Figure 4. The rubber compound originally present on the cover supplies the binding material between the layers of metal necessary to insure a permanent or hermetic seal on the container. Figure 5 illustrates in cross-section a closed sanitary can as it comes to the consumer.

In the past twenty-five years great progress has been made in the development of tinplate, compounds and automatic sealing machines. Collectively, these developments enable present-day canners to impose a permanent seal on the cans containing their products more easily and rapidly than ever before in the history of canning.

(1) The Story of the Tin Can, American Can Company, New York, 1935



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gery, and Dr. Harold Feil, assistant clinical professor of medicine, Western Reserve University School of Medicine.—Bulletin.

ERIE

Members of the Erie County Medical Society were hosts for a refresher course in obstetrics sponsored by the Bureau of Child Hygiene State Department of Health, Thursday, April 21, at the Hotel Rieger, Sandusky. Dr. Sterling H. Ashmun, Dayton, was the guest speaker. Although only physicians from Sandusky, Ottawa, Huron, and Lorain counties were invited, there were 72 present, including several from Toledo, Cleveland, New London and Tiffin. Following the afternoon lectures, a banquet was held, after which there was continuattion of the discussion.—Ross M. Knoble, M.D., secretary.

GEAUGA

First 1938 meeting of the Geauga County Medical Society was held at Burton, Wednesday, April 27. Bulletins received from the State Headquarters Office since January 1 were read and discussed. Dr. Lucy Stone Hertzog, chairman of the Public Relations Committee, was authorized to proceed in accordance with her recommendations on certain urgent matters. A program committee was appointed and plans made for future meetings during the spring and summer.—Isa Teed Cramton, M.D., secretary.

LORAIN

Dr. S. V. Burley, Lorain, spoke on "Diseases of the Eye, Ear, Nose and Throat as Related to the General Practitioner", at a meeting of the Lorain County Medical Society at Hotel Antlers, Lorain, Tuesday afternoon, May 3.—L. H. Trufant, M.D., secretary.

MEDINA

At a meeting of the Medina County Medical Society, Thursday, April 21, at the Evanon, Medina, Dr. Arthur C. Ernstene, Cleveland, was the guest speaker.—News clipping.

Sixth District

(COUNCILOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

ASHLAND

On Friday evening, May 13, the Ashland County Medical Society held its regular dinner meeting at the Hotel Otter, Ashland. Dr. E. L. Jackson, Perrysville, was welcomed back to take his place as president, relieving Dr. E. L. Clem, president-elect, who had been acting-president during Dr. Jackson's absence. Dr. Harry E. LeFever, Columbus, spoke on "Acute Craniocerebral Injuries, Their Diagnosis and Management". Dr. LeFever presented some very interesting and instructive material which was well discussed.

Members of the society were guests of Dr. G. P. Reibel at an informal movie party at his home, Friday evening, May 20.—M. D. Shilling, M.D., secretary.

MAHONING

Dr. Paul White, physician on the staff of Massachusetts General Hospital, Boston, spoke on "Heart Disease" at a meeting of the Mahoning County Medical Society, Tuesday evening, May 17, at the Youngstown Club, Youngstown.

The society paid tribute to Dr. Harman E. Blott at this meeting, on the 50th anniversary of his entrance into the practice of medicine.—Bulletin.

PORTAGE

Members of the Portage County Medical Society were guests at the home of Dr. L. W. Prichard, Ravenna, Thursday evening, May 5. Dr. Claude B. Norris, Youngstown, gave an illustrated lecture on "Various Skin Diseases Caused by Ringworm Infections".—E. J. Widdecombe, M.D., secretary.

RICHLAND

Members of the Richland County Medical Society and their wives heard Dr. Louis J. Karnosh, Cleveland, speak on "Famous Quacks in History", at a dinner meeting in the Leland Hotel, Mansfield, Wednesday evening, April 27.

Dr. E. P. McCullagh, Cleveland, spoke on "The Diagnosis and Management of Functional Menstrual Disorders", at a meeting of the society, Thursday afternoon, May 19, at Mansfield General Hospital.—W. W. Peirce, M.D., secretary.

STARK

A committee of Alliance physicians arranged the program for a meeting of the Stark County Medical Society at the Alliance Country Club, Wednesday, May 18. A golf tournament was held in the afternoon. After dinner, a symposium on "Urological Problems in the Extremes of Life"

IMPORTANT COUNTY SOCIETY ACTIVITY

While the usual activities of most of the county medical societies will be suspended during the summer months every society and each individual member has an important job to do this summer, namely, helping in the survey of medical care being conducted by the American Medical Association and the Ohio State Medical Association, with the cooperation of the county medical societies. Survey blanks are now being sent to county society officers. If the survey is to accomplish its purpose, every member of medical organization must do his part. Will you do yours?

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was presented by Dr. Wm. E. Lower and Dr. Wm. J. Engel, Cleveland.—Clair B. King, M.D., secretary.

SUMMIT

Dr. George I. Bauman, Cleveland, assistant clinical professor of orthopedic surgery, Western Reserve University School of Medicine, spoke on "Osteomyelitis", at a meeting of the Summit County Medical Society, Thursday evening, May 3, at the Mayflower Hotel, Akron.—Bulletin.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

COLUMBIANA

"Practical Proctological Problems" was the subject discussed by Dr. Paul H. Beaver, Leetonia, at a meeting of the Columbiana County Medical Society, at Lisbon, Tuesday night, April 12.—News clipping.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

GUERNSEY

Members of the Guernsey County Medical Society entertained their wives and friends at dinner, Thursday evening, April 21, at the Cambridge Country Club.

Dr. Gilman D. Kirk and Dr. Mark D. Godfrey, Columbus, spoke on "Surgical and Medical Management of Gall Bladder Disease", at a meeting of the society at the Berwick Hotel, Cambridge, Thursday noon, May 5.—O. Reed Jones, M.D., correspondent for *The Journal*.

LICKING

At a meeting of the Licking County Medical Society, Tuesday, April 26, at Newark, Dr. R. S. Dinsmore, Cleveland, discussed "Treatment of Diseases of the Thyroid".—Paul C. Grove, M.D., correspondent for *The Journal*.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

GALLIA

Dr. David L. Beers and Dr. Wm. L. Brown were speakers at a meeting of the Gallia County Medical Society, Thursday evening, April 7, in the library of Holzer Hospital, Gallipolis.—News clipping.

SCIOTO

At a meeting of the Hempstead Academy of Medicine of Scioto County, Monday evening, May 9, at the Portsmouth General Hospital, Dr. R. W. Kissane, Columbus, discussed "Some Diseases of the Heart".—W. M. Singleton, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

Columbus Academy of Medicine presented the following programs during May:

May 2—Joint Meeting with the Columbus Ophthalmological and Oto-Laryngolocial Society. "The Treatment of Facial Injuries and Deformities," by Dr. Claire L. Straith, Detroit, Mich.

May 16—"The Medical Management of Essential Hypertension", by Dr. Edward Weiss, professor of medicine, Temple University Medical School, Philadelphia, Pa.

May 23—Section in General Medicine. "Toxemias in Pregnancy", by Dr. Franklin C. Hugenberger; "Some Common Skin Diseases of Infants and Children", by Dr. L. L. Praver.—Bulletin.

MORROW

The motion picture, "Syphilis", prepared by the American Medical Association and the U. S. Public Health Service, was presented by Dr. W. P. Johnson, chief, Bureau of Veneral Diseases, State Department of Health, at a meeting of the Morrow County Medical Society, Tuesday evening, May 10, at the Globe Hotel, Mt. Gilead.—T. Caris, M.D., secretary.

UNION

Representatives of the Federal Farm Security Administration were the speakers at a meeting of the Union County Medical Society, Tuesday evening, May 3, at the Oakland Hotel, Marysville. —News clipping.

CLASSIFIED ADVERTISEMENTS

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NEWS NOTES

Akron—Under the direction of Dr. Harold J. Gordon a course in human relationships and association of the sexes will be studied in local schools beginning next Fall.

Archbold—Dr. Edwin R. Murbach was the speaker at a recent joint meeting of the Fulton County Tuberculosis and Health Association and the Wauseon Parent-Teachers Association.

Beaver—Dr. W. L. McCaleb has been re-elected a member of the Pike County District Board of Health for a term of three years.

Bluffton—Dr. M. R. Bixel has been re-elected a member of the Allen County Board of Health.

Bucyrus—Dr. W. L. Yeomans has been appointed to the local civil service commission.

Canton—Stark County Medical Society has organized a speakers' bureau of 30 physicians available for addresses on medical subjects before any group which may desire a speaker.

Cardington—Dr. E. C. Sherman is the new president of the Marion chapter of the Pan-American Medical Association. Other officers are Dr. J. G. McNamara, vice-president; Dr. C. G. Smith, secretary, and Dr. E. L. Brady, treasurer, all of Marion.

Chardon—Dr. Fred S. Basquin and Mrs. Martha Kuenster, nurse at Corey Hospital, were recently married.

Cincinnati—A special naval medical unit is being organized here under the leadership of Dr. Lloyd B. Johnston and Dr. Charles J. McDevitt.

Cleveland—Socialized medicine was attacked as a "thinly disguised Communistic measure" in a National Hospital Day radio broadcast by Dr. John Dickenson, President of the Cleveland Academy of Medicine.

Columbus—Dr. Howard D. Giles was the guest speaker at a meeting in Springfield observing National Negro Health Week.

Coshocton—Preliminary plans for a $25,000 addition to the local hospital have been approved by members of the hospital board.

Dayton—Speakers in the recent Y. W. C. A. health educational series included Dr. T. M. K. Kirk and Dr. H. R. Campbell.

Fostoria—Dr. J. L. Murphy spoke on "Spinal Anaesthesia", at a recent meeting of the Lions Club.

Gallipolis—"Heredity", was the subject discussed by Dr. G. G. Kineon, superintendent of the State Hospital for Epileptics, at a recent

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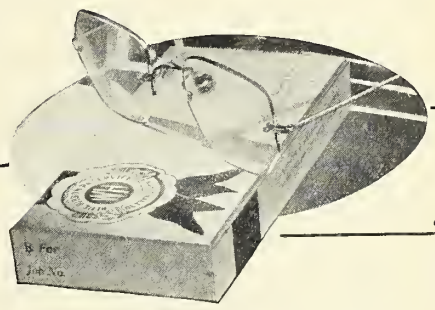
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meeting of the Perry County Ministerial Association, at New Lexington.

Litchfield—Dr. Harry Streett has been re-elected president of the Board of Directors of the Lodi Hospital Company.

Loudonville—Dr. J. M. Heyde has retired from the practice of medicine.

Massillon—An illustrated talk on "A Trip to Germany" was given by Dr. H. P. Hart at a recent meeting of the Rotary Club.

Oakwood—Dr. Walter M. Simpson spoke on "Recent Developments in Medicine", at a recent meeting of the Shafor Boulevard School Association.

Piqua—Work has been started on the new $66,000 maternity wing to Memorial Hospital.

Toledo—Dr. Thomas M. Crinnion, chief of staff of St. Vincent's Hospital, and Miss Grace G. Collins were recently married.

Wooster—Dr. Jean M. Douglas, spoke on "Health and Hygiene" at a recent meeting of the Coshocton Business and Professional Women's Club.

Youngstown—Dr. John Heberding is the new president of the Cleveland Radiological Society.

Interesting Point in Malpractice Cases Found in Recent Decision

An interesting point involving alleged malpractice is contained in a recent opinion of the Ohio Supreme Court, (133 O.S., No. 26509, pages 304-315), in which the Court upheld the Court of Appeals' affirmation of the trial court's action in sustaining a motion for a directed verdict in favor of the physician-defendant.

Syllabus of the opinion follows:

"1. In localities in which accepted medical and surgical practice requires that, if, after proper setting of the parts of the broken neck of a femur by the attending physician and a bony union has formed, there is a grating sensation in the broken parts, an X-ray photograph should be taken to determine whether there has been disunion of the parts through absorption, so that the broken bone may be reset if it has become disunited, the failure of the attending physician who has been in charge of the patient from the beginning to cause or advise the taking of such a photograph on learning of the grating sensation, until it is too late to reset the bone, the parts of which have become disunited through such absorption, is evidence of the negligence or unskillfulness of the attending physician amounting to malpractice and warrants the submission of that issue to the jury.

"2. Even though there is evidence of malpractice sufficient for submission to the jury on that issue, a verdict must be directed in favor of the defendant where there is no evidence adduced which would give rise to a reasonable inference that the defendant's act of malpractice was the direct and proximate cause of the injury to the plaintiff."

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Ohio Public Health Association Elects Officers for 1938-39

At the annual meeting of the Ohio Public Health Association, May 19, at Columbus, the following officers were elected for the ensuing year:

Dr. E. L. Brady, Marion, president; Dr. John Srail, Springfield, first vice president; Mrs. George J. Blazier, Marietta, second vice president; Dr. Charles A. Doan, Columbus, secretary; and Chester C. Cook, Columbus, auditor. Trustees elected for a term of three years included Dr. Dean H. Minnis, Amherst; Dr. Robert Trimble, London; Dr. T. W. Mahoney, Toledo; Dr. H. F. Rapp, Portsmouth; Dr. E. B. Pierce, Canton; Dr. J. C. Placak, Cleveland; and Dr. W. W. Lawrence, Norwalk. The Board of Directors appointed Thomas H. Dickson, Columbus, to serve as treasurer and John W. Bricker, Columbus, to serve as counsel. Founder members of the Association elected to honorary membership included Dr. Walter W. Brand, Toledo; Dr. Henry K. Dunham, Dr. Albert H. Freiberg, Dr. Samuel Iglauer and Dr. William Muhlberg, Cincinnati; Dr. Frank L. Stillman, Dr. Elmer G. Horton, Dr. Andrew J. Timberman, Dr. J. H. J. Upham and Dr. Frank Warner, Columbus; Dr. John Jay Sutter, Bluffton, and Dr. H. E. Welch, Youngstown. Among the service members elected to honorary membership were Dr. Leslie L. Bigelow, Columbus, and Dr. Robert H. Bishop, Jr., Cleveland. Dr. Charles A. Neil, Cincinnati, was elected a member of the executive committee for a term of three years.

Physician Musicians Present Concert

A capacity house applauded the Second Annual Musical Medley and Symphonic-Jazz Concert presented by the Cleveland Academy of Medicine at Severance Hall, April 29. The two-hour program of "melody and mirth", was divided into three parts entitled (1) Reduction of Fracture of the "Status Medicus", (2) Deflation of the "Corpus Ego", and (3) Removal of the "Serious Vein" under "Local Anesthesia". Dr. Lester Taylor and Dr. B. B. Larsen were masters of ceremonies. Personnel of the Cleveland Academy of Medicine Musical Maestros follows:

Dr. J. L. Reycraft, director; Dr. G. W. Petznick, assistant director; violins, Dr. Jerome Gross, Dr. D. M. Keating, (concert masters), Drs. H. C. Schock, G. W. Petznick, Henry E. Baum, M. M. Jackel, Walter Heymann, William L. Deeton, E. D. Schwartz, C. F. Lauster; violas, Drs. Eugene Arday, D. G. Allen and John T. Bohm; violin-cellos, Drs. Sylvester C. Missal and C. C. Engleman; bass viol, Drs. C. C. Couch and Tom Goslee; tuba, Dr. L. H. Samartini; oboe, Dr. B. B. Sankey; clarinets, Drs. Keith Folger and V. C. Kenney; saxophones, Drs. Charles Hudson, R. R. Robrock, Harry Wolf, John W. Conwell; trumpets, Drs. Alex Gross, Clarence Yaeger, Robert Yaeger; trombones, Drs. B. M. Avallone, Robert Court; horns, Dr. Roswell Lowry, Dr. O. B. Patch; banjos, Drs. Theodore Zuck and Curtis Garvin; accordion, Frank Panek; marimba-xylophone, Dr. C. T. Hemmings; percussion, Drs. J. M. Landers and Lincoln Dickey; pianos, Drs. John H. Budd and Bert Treister.

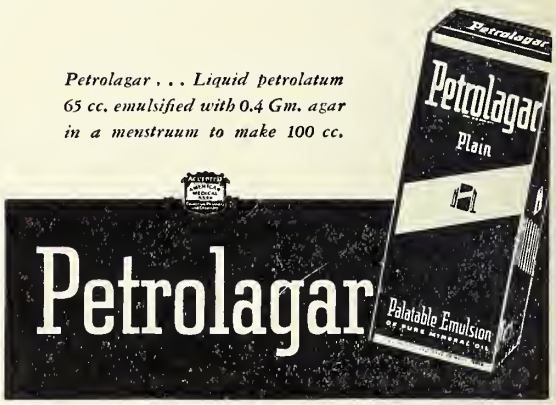
Columbus—Dr. J. E. Briggs is the new chairman of the surgical section of Grant Hospital.



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THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

Alcohol—One Man's Meat. By Edward A. Shecker, M.D., professor of psychiatry, University of Pennsylvania, and Francis T. Chambers, Jr., associate in therapy, Institute of the Pennsylvania Hospital. $2.50; MacMillan Company, New York, 1938; pp. 230.

In this book a careful statement of the psychology of alcoholism is drawn. Based upon this a scientific plan of treatment is developed. All in all, the book is recommended as an up-to-date discussion of a disease about which most of us physicians know all too little.

The New International Clinics—Vol. I—New Series—March, 1938. J. B. Lippincott & Company, Philadelphia, Pa.

This excellent collection makes its 1938 appearance in a very attractive new blue imitation leather back with green and gold name plate. Its contents maintain their high standard of originality and interest. Original contributions to be recommended especially are Longcope's observations on hemorrhagic nephritis, Gorham and Thompson's failure to confirm the prognostic significance of the sedimentation rate and differential leucocyte count in coronary exclusion, King's discussion of ten diseases which may simulate miliary tuberculosis by X-ray, and Bernstein's skin diseases from an emotional standpoint.

Clincs on the use of silk sutures, and digitalis in coronary artery disease and pneumonia, with a review of biliary stasis and decompression by Cantarow, add to the value of this volume.—Robert C. Kirk, M.D.

Leaves From a Surgeon's Case Book. By James Harpole. $2.75. Stokes, New York, 1938; pp. 300.

Written by a famous surgeon under a **non de plume**, the developments of medicine are set forth for the layman in the case record method by describing some of his own cases and experiences,—cancer, tetanus, hemophilia, diabetes, tuberculosis and many others. The author has successfully used the method which is new for his purpose.

Recent Advances in Pulmonary Tuberculosis. By L. S. T. Burrell, M.D., physician to Brompton Hospital for Consumption and Diseases of the Chest. Third edition, $5.00. P. Blakiston's Sons, Philadelphia, 1937; pp. 320, and 48 plates.

This is more than the title indicates, it is a rewritten manual on the subject. It fulfills almost perfectly its purpose of giving to medical students and general practitioners, in the typical, admirable British style, a manual on tuberculosis.

The Compleat Pediatrician (Second Edition—1938). By W. C. Davison, professor of pediatrics, Duke University School of Medicine. $3.75. Duke University Press, Durham, N. C., 1938.

In this completely rewritten second edition of his unique and outstanding book Dr. Davison has further simplified and made more easily workable his unique system of cross indexing pediatric diseases by their symptoms. The author states that he has thoroughly sifted some 7,500 recent references for this revision. This reviewer believes that Dr. Davison has succeeded remarkably well in correlating these newer advances with the pediatric knowledge previously summarized in the first edition.

As in his earlier edition the author has restricted himself to practical pediatric facts and procedures. In this more "Compleat Pediatrician" the author has added new chapters on "Growth", "Development", "Nutrition", and "Infant Mortality". In spite of the fact that this volume contains most of the important symptoms and signs, diseases, diagnostic methods and therapeutic procedures, the book is a practical, concise, complete and readily available reference, small enough to be carried in the medical bag.

This novel compendium is heartily recommended to both general practitioner and pediatrician as a distinct diagnostic aid. It will serve to jog the physician's memory on possibilities of diagnosis that will frequently prove of greatest assistance. Any physician dealing with children

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should certainly have this book available.—M. L. Ainsworth, M.D.

The Art and Science of Marriage. By Esther Bogen Tietz, Ph.D., M.D., Longview Hospital, Cincinnati, and Charles Kipp Weichert, Ph.D., University of Cincinnati. $2.00. Whittesley House, New York, 1938; pp. 279.

This is the fifth volume in the Whittesley House Health Series under the editorship of Morris Fishbein, M.D. The authorship is most happy —a woman physician with special training in the field of the mind, and a man biologist with a thorough understanding of the evolution of the human being as a physical mechanism. "The science" is most accurately presented on a much broader plan than is usual. "The art" is presented in a simple matter-of-fact manner which only educates and cannot offend even the elders of our own profession who are the most sensitive of all people.

J. B. Murphy, Stormy Petrel of Surgery. By Loyal Davis, M.D., M.S., Ph.D., professor of surgery in Northwestern University. $3.00. G. P. Putnam's Sons, New York, 1938; pp. 311.

The eighth occupant of the chair of surgery in Northwestern University writes authoritatively of the fourth occupant and gives us a faithful picture of this fascinating personality. It is more than a biography of J. B. Murphy as splendidly as that has been done. It is accurate history of midwestern surgery during the life time of the hero. Most of us here in Ohio will, I am sure, welcome this book and hasten to read it with pleasure and profit.

Bewildered Patient. By Marian Staats Newcomer, M.D. $1.75. Hale, Cushman and Flint, New York, 1938; pp. 325.

If any physician has an intelligent patient who has become skeptical of what is done for him then here is a book the physician should get and lend to such a patient. It is the answer to many of the questions which are raised by the attacks on medicine in currently popular magazines. These matters are covered in chapters entitled: Choosing a physician, costs to the average family, home care of the sick, consultation and cooperation, playing fair with the medical profession, what a physician can do for you, a complete physical examination, et al. Then there are good chapters devoted to hygiene and health. It is the reviewer's belief that every physician would profit by having two or three copies of this book to lend selected patients as counter-propaganda in these days of unrest.

Pasteur, Knight of the Laboratory. By Francis E. Benz. $2.00. Dodd, Mead and Company, New York, 1938; pp. 232.

A remarkable presentation of Pasteur's story to the larger boys and girls. It is written so that it will interest them in not only the man himself but in the priceless contribution he made.

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Vol. 34 JULY, 1938 No. 7

REPORT OF TEN CASES OF TYPHOID FEVER WITHOUT A FATALITY

By J. W. BURROWS, M.D., LAKESIDE, OHIO

THIS is a report of an epidemic of typhoid fever occurring in the fall of 1937. After the outbreak of this epidemic, the Ohio State Department of Health tested all of the public wells in this locality. Although a number were found to be contaminated, the well responsible for the outbreak was located on the site of a tourist camp and general store. Investigation of the premises disclosed that the cesspool was located within 25 feet of the only source of water used on the grounds for drinking, showers and cleaning purposes.

The well was drilled and was 80 or more feet deep. The only logical explanation for its being contaminated was seepage due to heavy rains a month before. The typhoid organisms undoubtedly were deposited by a tourist carrier.

All of the patients in the report had been served ice cream at the store or had taken a drink of water at this particular well.

CASE REPORTS

1. K. S. White, well developed male, age 23, occupation clerk.

History: Malaise, anorrhexia, loss of weight for two weeks. Chills and fever for one week. Occasional loose stool. Slight abdominal pain on the right side of one week's duration.

Physical Examination: White, well developed male, age 23, acutely ill. Temperature 101.2°, pulse 72, respiration, 20. Head of normal size and contour; chest, normal voice and breath sounds; heart, no murmurs or accentuations; blood pressure 118/78; abdomen, no rigidity, slight tenderness over McBurney's point; no palpable masses; genitalia normal; extremities normal.

Laboratory Work: X-ray of chest, negative for tuberculosis. Hemoglobin 82 per cent; red blood count 4,200,000; white blood count, 5,400; polymorphonuclears 80 per cent; lymphocytes, 20 per cent. Urine negative. Widal positive in dilution 1:40; no history of typhoid fever or typhoid inoculations.

Hospital Course: The patient had a septic type of temperature continuing for three weeks which receded to normal by lysis. The patient was discharged convalescing four weeks after admission to the hospital. His stool at time of discharge was negative for typhoid organisms.

2. G. W. White male, age 38, occupation, scale man.

History: Chills and fever for one week. Marked sweating and at times he said he felt like he was dying. Black tarry stools for three days. Admitted to hospital one week after onset of symptoms.

Physical Examination: Acutely ill, well de-

Submitted April 8, 1938.

The Author

● Dr. Burrows is a graduate of St. Louis University School of Medicine, 1932; member of staff of Providence Hospital, Sandusky, Ohio.

veloped white male, age 38. Temperature 103°, pulse 100, respiration 26. Head normal, chest normal, heart, no murmurs; blood pressure 124/80; abdomen, no rigidity, no palpable masses, slight tenderness in the right and left lower quadrants; diarrhea with black tarry stool.

Laboratory Work: White blood count 6,000; polymorphonuclears 78 per cent; lymphocytes 22 per cent; Widal positive in dilution 1:40; no history of typhoid or inoculations. Urine negative.

Hospital Course: The patient's temperature curve was of the septic type, which receded by lysis for two weeks. At this time he developed a bronchial pneumonia with a marked rise in temperature which continued for three weeks, approaching normal by lysis. He was discharged six weeks after admission with his stool negative for typhoid organisms.

3. A. D. White female, age 53, housewife.

History: The patient had an attack of pain in the upper right side of her abdomen two weeks ago which was followed by vomiting and diarrhea. Chills and fever developed shortly afterward. One day later she complained of pain in the right chest with each breath. Six years ago she had an attack of sudden pain in her upper right abdomen which was relieved by a "shot." Her condition did not improve so she was hospitalized.

Physical Examination: White female, age 53. Temperature 102°, pulse 90, respiration 22. Head normal, chest, normal voice and breath sounds, no friction rubs; heart, cardiac murmurs in the aortic and mitral areas; blood pressure 140/90; abdomen, no rigidity, tenderness in the upper quadrant; genitalia normal.

Laboratory Work: White blood count 3,400, polymorphonuclears 62 per cent; lymphocytes 38 per cent, Widal positive in dilution 1:40. Urine negative.

Hospital Course: Uneventful recovery. She was discharged three and a half weeks after admission with stool negative for typhoid organisms.

4. White female, aged 4.

History: About three weeks ago the child had an acute gastro-enteritis accompanied by cramps and diarrhea which subsided in a few days. Three days ago she developed chills and fever, and a bloated abdomen.

Physical Examination: White female, aged 4, acutely ill. Temperature 103°, pulse 100, respiration 22, head normal, chest normal, heart normal, abdomen markedly distended, tenderness in the right lower quadrant, rose spots.

Laboratory Work: White blood count 13,000; polymorphonuclears 68 per cent; lymphocytes 32 per cent, Widal positive in dilution 1:40.

Hospital Course: Uneventful recovery. She was discharged with negative stool four weeks after admission.

5. C. W., white, undernourished male, aged 34, salesman.

History: One month ago had an attack of acute gastroenteritis. Abdominal cramps, diarrhea and fever. Two weeks ago he noticed marked loss in weight and gradual increasing weakness. Three days ago he developed chills and fever and noticed slight pain in his abdomen.

Physical Examination: White, undernourished male with evidence of recent loss of weight. Temperature 101°, pulse 88, respiration 22; head normal; chest normal; heart normal. Blood pressure 120/80; abdomen—no rigidity, tenderness in right lower quadrant.

Laboratory Work: White blood count 9,600, polymorphonuclears 78 per cent lymphocytes 22 per cent, Widal positive in dilution 1:40, no history of inoculations or attack of typhoid fever.

Hospital Course: Temperature fall by lysis. Uneventful recovery. Discharged from hospital four weeks after admission with stool negative for typhoid.

6. M. G., white, well developed male, age 29. One week ago noticed pain in epigastric region which was followed by chills and fever.

Physical Examination: White, well developed male. Temperature 103.4°, plus 80, respiration 24; head normal, nose, frequent hemorrhage, abdomen distended, tenderness in right lower quadrant; loose tarry stool.

Laboratory Work: White blood count 5,800, polymorphonuclears 77 per cent, lymphocytes 23, Widal positive in dilution 1:160.

Hospital Course: Stormy. Frequent nasal hemorrhage, marked toxemia and delirium, temperature fall by lysis. Discharged from hospital after six weeks, stool negative for typhoid.

7. R. K., white male, age 19, laborer.

History: Two weeks ago he states he had an acute gastro-intestinal upset accompanied by emesis, diarrhea and fever. For two days he had chills and fever with an occasional nose bleed.

Physical Examination: White, undernourished male, age 19, acutely ill and delirious. Temperature 103°, pulse 96, respiration 22; head, frequent nasal hemorrhage; chest, no rales or friction rubs; heart, murmurs in the aortic and mitral areas; blood pressure 110/80. Abdomen, rose spots, no rigidity, tenderness in both lower quadrants; frequent loose greenish stool.

Laboratory Work: White blood count 11,400, polymorphonuclears 82 per cent, lymphocytes 18 per cent, Widal positive in dilution 1:320.

Hospital Course: The patient was delirious for approximately two weeks. He developed a marked cyanosis which continued for three weeks. At the end of three weeks he began to show signs of improvement. The temperature receded by lysis. He was discharged six weeks after admission, his stool negative for typhoid organisms.

8. M. M., white, well developed male, aged 19, laborer.

History: Pain in the pit of his stomach, chills and fever the day after he received his first shot for typhoid. His symptoms continued for four days and hospitalization was advised.

Physicial Examination: White, well developed male, age 19, laborer. Temperature 103°, pulse 96, respiration 24; acutely ill, head normal, chest normal, abdomen no rigidity, tenderness in the epigastric region, slight tenderness in the right lower quadrant; protruding and enlarged hemorrhoids.

Laboratory Work: White blood count 4,000, polymorphonuclears 70 per cent, lymphocytes 30 per cent, no Widal test was taken on account typhoid inoculation.

Hospital Course. His course at the hospital

was stormy for about three weeks. The temperature finally dropped by lysis to normal. He was discharged five weeks after admission, stool negative for typhoid.

9. V. K., white female, age 18, housewife.

History: For about two weeks she had cramps, diarrhea and fever. For two days she had chills and nosebleeds.

Physical Examination: White, undernourished female, age 18, acutely ill and delirious. Temperature 105°, pulse 116, respiration 22, with a severe anemia. Head normal except for an engorged nasal mucous membrane which bled readily. Chest normal, heart normal, pulse thready and fast. Blood pressure 108/70; abdomen, no palpable masses, rose spots, tenderness in the right lower quadrant.

Laboratory Work: White blood count 5,200, polymorphonuclears 73 per cent, lymphocytes 27 per cent, Widal positive in dilution 1:320.

Hospital Course: Her course was stormy for three weeks. Her temperature receded to normal by lysis. She was discharged six weeks after admission with stool negative for typhoid.

10. F. E., white female, age 28, approximately 7½ months pregnant.

History: About two weeks ago the patient tripped on a rug and fell to the floor striking her right hip. Three days later she noticed a frequency of urination with pain in the small of her back. One week later she developed a sore throat with slight fever. Shortly afterward she complained of pain in her stomach accompanied by heart burn and excessive belching. One day prior to admission she had frequent chills and fever.

Physicial Examination: White, well-developed female, age 28, pregnant 7½ months, anemic and acutely ill. Temperature 102.4°, pulse 100, respiration 22; head normal, chest normal, heart, murmurs in the aortic and mitral areas; blood pressure 120/80; abdomen, large tumor mass extending from symphysis pubis to half the distance between the umbilicus and xiphoid process; F. H. S. L. L. Q. cephalic presentation L. O. A. Tenderness in the epigastrium and right lower quadrant, tenderness in both lumbar regions.

Laboratory work: White blood count 11,000 polyphormonuclears 87 per cent, lymphocytes 13 per cent, red blood count 3,020,000, hemoglobin 60 per cent, Widal positive in dilution 1/80. Urine positive for pus cells.

Hospital Course: For ten days the patient's condition gradually became worse. At this time she was given a blood transfusion. Following the transfusion her temperature rose to 106.4°, lasted for an hour and then receded to 95°. When the temperature rose to 100.2°, delivery was forced by pituitrin and quinine. After labor had begun a manual dilatation was done because of the patient's condition. A living six-pound boy was delivered. After the delivery the patient's condition improved. Patient and baby were discharged six weeks after admission, both stools negative for typhoid. The baby at no time showed evidence of having contracted typhoid fever.

Balance Fantasy with Fact: Dream but also do; wish but build; imagine but ever face reality. —Fetterman.

Fungus Infections of the Lungs

Fungi frequently invade the pulmonary tissues as purely saprophytic and non-pathogenic agents. This is notably true of the aspergillus and the penincillium. However, a large group may more adversely affect the respiratory passages primarily, producing mild or severe infections, or co-existently with other diseases, notably pulmonary tuberculosis, and to a lesser extent, bronchitis, abscess, bronchiectasis and malignant tumors. The lung changes produced by these fungi are legion, and the symptoms may resemble almost any acute or chronic pulmonary disease. In chronic infections there is ordinarily present a great deal of fibrosis throughout the lung tissue and pleura. The lung findings in fungus infections are usually more basal than in tuberculosis. The general symptoms may be less marked than in phthisis.

Immunity reactions, complement fixation, and agglutination tests and skin hypersensitiveness may be of some aid in diagnosis. Louis Hamman describes certain roentgenologic pictures which may be interpreted with the history and the other clinical findings as suggestive of bronchomycosis. He says:

"There may be (1) a dense shadow with irregular margins and radiating bands, situated near the hilum and without the surrounding soft shadows usually seen in tuberculosis; (2) scattered, small, clearly defined shadows, sometimes with, sometimes without, one or more large dense shadows and at autopsy these small shadows correspond with small abscesses; (3) a dense mottling of one or both lungs, with numerous small shadows resembling the picture of acute disseminated miliary tuberculosis."

Fungi are too frequently found in the sputum of chronic pulmonary invalids to be always considered harmless and non-consequential. There is likely an added infection in some cases. Again, there may be the possibility of a mistaken diagnosis. Especially is this true in bronchostroptothricosis, which may masquerade as pulmonary tuberculosis.

Fungi should be searched for in all chronic lung conditions, especially when the tubercle bacillus is not found after repeated examinations. —Alvis E. Greer, M.D., F.A.C.P., Houston, Tex.; Tex. St. Jr. of Med., Vol. XXXIII, No. 11, Mar., 1938.

Landmarks in Diabetic Research

A Frenchman in 1846, was the first suspect the pancreatic origin of diabetes. Two German physicians proved it in 1889. An American, in 1901, and a Russian, in 1902, first showed independently that the Islands of Langerhans in the pancreas are involved. Canadians discovered insulin in 1921. A Dane, in 1935, proved the value of the addition of protamine to insulin.—Bulletin, Metropolitan Life Ins. Co., Vol. 19, No. 4, April, 1938.

INJURIES OF THE UPPER CERVICAL SPINE AND THEIR X-RAY FINDINGS

By H. F. PLAUT, M.D., CINCINNATI, OHIO

INJURIES of the upper cervical spine present certain diagnostic difficulties. Some patients wait for months and years before consulting a physician. In this later stage they are not only seen by general practitioners, surgeons and orthopedists; age, nerve symptoms and location of the injury may lead them first to pediatricians, neurologists, internists and oto-laryngologists.

The history, external and pharyngeal palpation and neurological examination draw the attention to the site of the lesion. Except for a dislocation of the atlas they will rarely reveal the nature of the injury. For an exact diagnosis of all traumas of the upper cervical spine, the roentgen examination is indispensable. This region is not well accessible to exploration; complex cord symptoms and unusual anatomic features open the door to clinical and roentgenologic diagnostic failures.

It is the purpose of this paper to discuss a few rules for interpreting the roentgenograms. What otherwise would need lengthy explanations is illustrated by diagrams of the more common fractures and dislocations.

ANATOMY

The atlas, the first cervical vertebra, has no body proper. It forms a ring composed of the two lateral masses connected by the anterior and rather thin posterior arches, surrounding a wide aperture. The transverse processes extend far laterally; there is no spinous process. In the opening, formed by the anterior arch of the atlas and the strong transverse ligament, rises the odontoid process which originates from the body of the atlas. It has, instead, grown together with the body of the axis and serves as pivot for the rotation of the skull and the atlas. The third cervical vertebra is a typical one. All seven are characterized by the foramen in the transverse process for the vertebral artery and vein.

ETIOLOGY

Falls on staircases always have been a cause for neck injuries. They are more frequent in old age and after excessive intake of alcohol. Other hazards have been outnumbered in modern times by three major groups: traffic, occupational and sport accidents.—Direct traumas by projectiles are omitted for the sake of concentration.

Pedestrians when struck by a car may suffer injuries of the neck; however other regions are more exposed to the first direct impact. Occupants of automobiles, in contrast, have the lower half of their body rather well protected, while according to their seat in the car, the upper half is injured by glass, steering wheel, dashboard, top, etc. The chance of trauma is increased by the freer mobility of the skull, neck and upper trunk which bear the momentum in a sudden stop.

Occupations taking place at a certain height from the ground imply the risk of tumbling with injuries to the skull and spine: building, roofing, house painting and repairing, working aboard ships on rigging and near holds. Farm labor on haylofts, strawstacks and wagons also has its hazards of headlong falls. In mining loosening of stones and cave-ins add constant risks.

A third group of cervical injuries happens in plunging on the floor of gymnasiums, striking the bottom of swimming pools and similar sport accidents.

PATHOLOGY

Fractures and dislocations in the upper neck are frequently combined. If one of these lesions is present, it is advisable to search for the other. The next vertebra above a fractured body is often found to be displaced anteriorly and somewhat downward.

ATLAS

The atlas is built for rotation. The capsule of the atlanto-axial joint permits free rotation of the atlanto-occipital unit for 30° to either side of the midline. Separate rotatory movements of the skull are prevented by the ligamentum cruciatum. Displacements of the atlas occur mostly as unilateral and bilateral rotatory and as bilateral anterior dislocations. Posterior luxation cannot happen when the anterior arch and the odontoid process of the axis are intact.

More fractures of the posterior and the anterior arch may happen than is generally thought;[4] those of the lateral masses and of the transverse processes are the exception. A com-

Submitted April 16, 1938.

The Author

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mon coincident is a fracture of the odontoid process, less frequent a rupture of the transverse ligament.

In rotatory dislocation of the atlas the head is fixed in a rotated position and in the more severe cases is inclined toward the shoulder. In unilateral anterior dislocation the chin points toward the healthy side, in unilateral posterior dislocations the chin points toward the dislocated side.

The X-ray view in A P direction through the open mouth shows a rotated asymmetrical position of the atlas and a partial overlapping of the articular facets of the atlanto-axoid joint. Any difference in the distance of the right and left lateral mass from the odontoid process is a reliable sign for a displacement (Fig. 1).

As demonstrable by stereoscopy in bilateral rotatory dislocation one side is dislocated forward, the other backward.

Much more severe are the results of an anterior dislocation of the atlas on both sides. With intact odontoid process this can only happen after traumatic rupture of the transverse ligament or loosening of its anchorage as a result of decalcification (Fig. 2). In recent years several authors have pointed out the frequency of these so-called nontraumatic atlas luxations in the first decade of life. About one quarter of cases of isolated dislocation of the atlas are known to happen spontaneously after inflammatory processes in the pharynx, tonsils, mastoid, and after generalized exanthemas.[1]

Two cases are reported where the odontoid process of the axis was missing, and a forward dislocation of the atlas took place. Cord injuries are frequent in anterior dislocations of the atlas; however recovery even from quadriplegia is reported. The dislocations in connection with fracture of the odontoid will be discussed later.

Fractures of the atlas are relatively rare; however present day automobile accidents are apt to produce these injuries more frequently.[5] The clinical signs are scarce. Pains in the upper neck preventing movements of the skull and causing some patients to hold their head with both hands are the dominating symptoms. Swallowing might be impaired and painful in fractures of the anterior arch as a result of hemorrhage into the prevertebral space. Evidently there are no other means of diagnosing a fracture of the atlas clinically.

The lateral X-ray view shows the typical fracture gaps in the posterior arch close to the lateral masses very well. Upward angulation is common as a result of the pull of the rectus capitis posterior minor muscle.

In fractures of the anterior arch the soft tissues in front of the spine may be swollen similar to findings in a retro-pharyngeal abscess. The distance between the anterior arch and the odontoid process might be slightly increased. However, any considerable separation of these two structures is significant for a rupture of the transverse ligament (Fig. 2). The actual fracture gap in the anterior arch may be demonstrable in the A P view through the open mouth. Trismus and other individual features sometimes interfere with a clear view of the anterior arch. The structure then can be demonstrated in an axial direction projecting the entire atlas into the space between the mandible and the posterior circumference of the occiput. For detailed demonstration of the anterior arch the author uses a new technique: the enoral view in P A direction with a tooth film pressed against the anesthetized posterior pharyngeal wall. Fractures of the lateral masses of the atlas are extremely rare, eight cases only being recorded in the literature. The fractures of the transverse process are of clinical interest because the fragments may injure the vertebral artery.

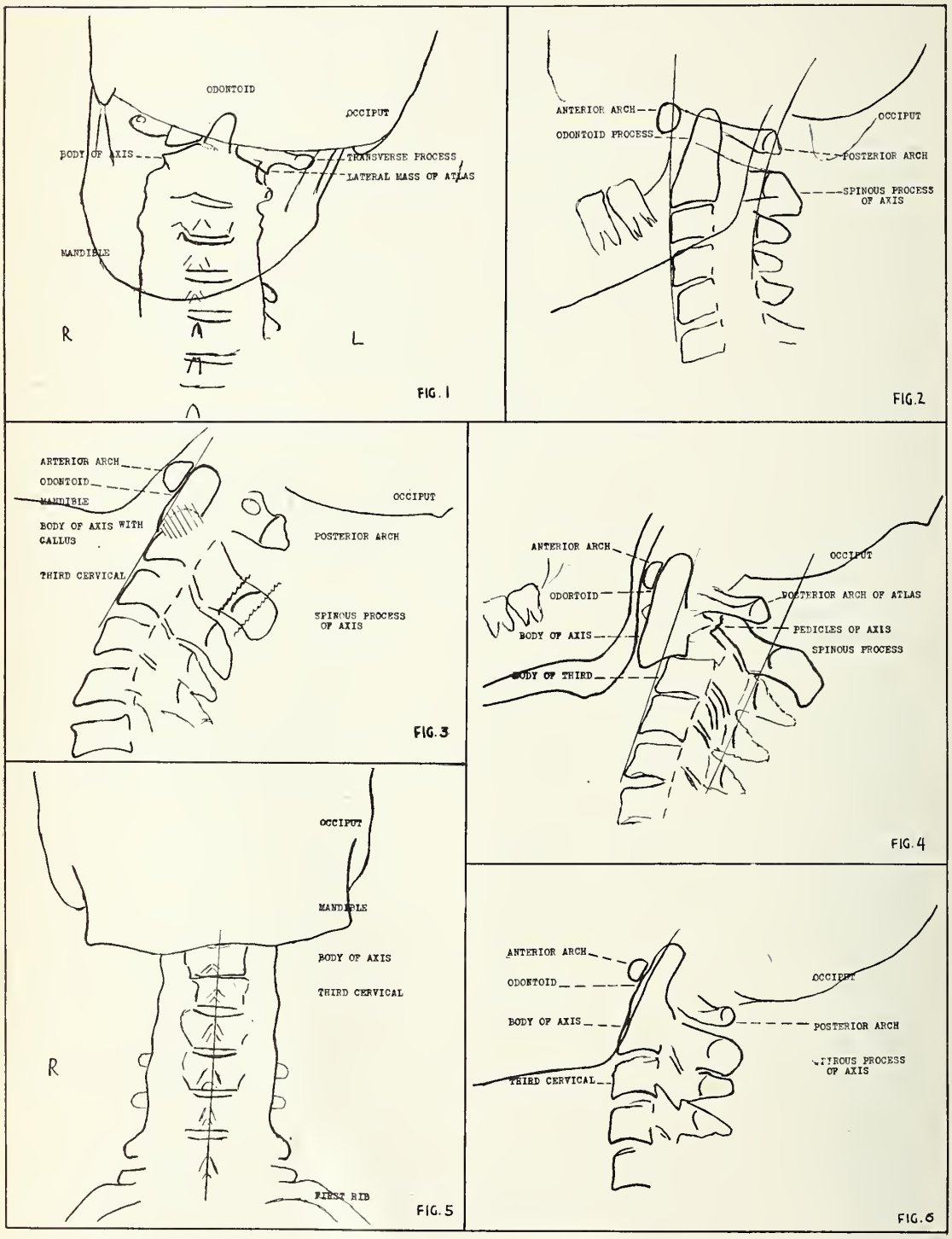
AXIS

The most quoted and dangerous injury to the upper cervical spine is the fracture of the odontoid process. Compared to the resistance of the transverse ligament and the stronger structure of the following vertebrae, the odontoid is rather vulnerable. As mentioned in the anatomical introduction, this process and the body of the axis originate from separate centers. Bony union usually takes place in the ninth year of life; however, remainders of the cartilage are demonstrable histologically up to mature age. The pivotal function of the dens exposes it to trauma. While the remaining vertebrae are interlocked by their strong articular facets, the odontoid process has to bear the full brunt especially of those forces acting on the skull and upper cervical spine in horizontal sagittal direction. The transverse ligament stands these injuries evidently better because in healthy individuals a fracture of the odontoid happens much more often than a rupture of this band.

The clinical signs are pain and rigidity in the upper neck. Additional rotatory dislocation is responsible for tilted head and deviating chin (Fig. 1). Cord symptoms are quite frequent. A violent force will fracture the odontoid process completely and displace it together with the atlas and the skull. Dislocation in anterior direction is readily recognized clinically.

On the lateral X-ray view it is characterized by a forward shift of the occipito-atlanto-odontoid unit beyond the anterior contours of the remaining cervical spine (Fig. 3). The resulting narrowing of the spinal canal endangers the cord immediately. On the other hand a backward displacement of that unit, likewise easily recognized, does not necessarily shear or compress the cord because there is ample space for this organ in

INJURIES OF UPPER CERVICAL SPINE



Legends on page 767.

LEGENDS

Fig. 1. A P X-ray view through the open mouth. Fracture of the odontoid process, revealed by its angulation, with left anterior rotatory dislocation of the atlanto-occipital unit. The relation of the articular facets of the atlas and axis is greatly disturbed. The right lateral mass appears closer to the odontoid than the left one. The right transverse process is standing higher than the left one. Note the deviation of the chin to the (healthy) right side, the inclination of the head to the left and the rotated position of the cervical spine.

Fig. 2. Anterior dislocation of the atlas on the axis as a result of a ruptured transverse ligament. Conclusive for this diagnosis is the space of about 6 mm. between the anterior arch of the atlas and the odontoid process. The anterior arch is seen in front of a line drawn tangential to the anterior edges of the following vertebrae. Correspondingly the posterior arch of the atlas is noted in front of a line connecting the posterior circumferences . . . . vertebral foramina.

Fig. 3. Fracture of odontoid of about seven weeks duration. Slight forward and downward displacement of the atlanto-odontoid unit is indicated by its protruding over a line drawn tangentially to the anterior edges of the remaining cervical bodies, and by the enlarged space between the posterior arch of the atlas and the neural arch of the axis. There is some callus formation. (The A P view shows the right lateral mass more distant from the odontoid than the left.) A posterior atlantoid foramen, a variation formed by a bony bridge between the posterior arch and the lateral masses, is seen. Although not present in this case, the site of a fracture through the spinous process of the axis is marked with a longer and one through the lamina with a shorter zig-zag line.

Fig. 4. Fracture through the pedicles of the axis. Marked forward and slight downward dislocation of the occipito-atlanto-axoid unit on the third clearly shown by the line drawn tangential to the anterior border of the cervical vertebrae. The posterior arch of the atlas is seen far in front of the line connecting the posterior circumferences of the vertebral foramina of the following vertebrae.

Fig. 5. Fracture of the upper anterior edge of the body of the third cervical vertebra with right lateral dislocation of the axis on the third. The intervertebral space between the axis and third is diminished. The spinous process of the axis is lying to the right of the line of the spinous processes of the remaining cervical vertebrae. Slight inclination of the head to the right.

Fig. 6. Lateral view of same patient. The intervertebral space between the axis and third is narrowed. Instead of a sharp contour of the upper edge of the body of the third an irregular curved line is noted.

the vertebral foramen of the atlas. A P roentgenograms through the open mouth demonstrate a line of transparency at the base of the odontoid in both complete and incomplete fractures. They also clearly reveal a lateral shift or angulation of the odontoid as a deviation from the straight line connecting the spinous processes. Here again studying the relation of the corresponding articular facets of the atlas and axis, to each other and to the odontoid, furthers an exact diagnosis (Fig. 1).

Fractures of the body of the second cervical vertebra do not result in the wedge-like compression, well known from the lateral roentgen views of the dorsal and lumbar spine. A forced flexion would rather exhaust itself in a fracture of the odontoid process and the ensuing dislocation. Partial fractures of the lateral upper edge of the body of the axis are observed (chipfracture). In headlong falls downstairs the momentum of the skull is extremely great, if the body is stopped in striking resistant objects, as illustrated in Fig. 4. The patient fell down a flight of stairs when under the influence of alcohol and struck some water pipes. He suffered from fractures of about ten ribs and the left clavicle. His skull obviously was not stopped immediately and the momentum resulted in a dislocation of the second vertebra on the third with fracture through both pedicles of the axis.—In hanging, the neural arch of the axis is crushed and the cord transected.

THIRD CERVICAL VERTEBRA

Anterior dislocations of the third vertebra are seen with concurrent fractures of the body of the fourth. In this region the gibbus is easier accessible for inspection and palpation. The spinal canal has become narrower. This, consequently, induces cord injuries by angulation or protruding fragments. Either the A P or the lateral roentgenogram will demonstrate any break in the normal course of the spine with the apex of the angulation at the level of the fracture.

Here is about the border of traumas to the upper cervical vertebrae. The lower ones are less protected against direct impact. Since the normal spinal curve changes from a lordosis of the neck to a kyphosis of the back, the cervical spine from the fourth vertebra down is also quite exposed to the effects of downward pressure on the skull. The upper dorsal vertebrae are well re-inforced, and better prepared to resist such violence. The majority of cervical fractures therefore happens in the region of the fifth and sixth vertebrae. The bodies suffer more from forced flexion. The spinous processes are broken in forced extension as in diving, while in the upper cervical region such injuries are less common. The abnormal mobility of a fractured spinous process might be elicited clinically. It should however be checked by X-ray views, whether the fracture just separates the tip or if it passes through the lamina, thus endangering the cord.

COMPLICATIONS

Head injuries with and without skull fractures are frequently associated with traumas of the upper cervical spine. Anterior and posterior dislocations of the atlas are more often followed by cord injuries than the rotatory dislocations and the fractures of this vertebra. Compression of the cord at such a high level above the origin of the phrenic nerve and the brachial plexus is liable to involve the diaphragm and all four extremities. With separation of the transverse ligament, dropping of the head by its own weight in upright position and simple pressure from behind in supine position may bore the odontoid process into the vital centers of the medulla oblongata or transect the cord. Fracture of the odontoid facilitates a sagittal dislocation of the entire occipito-atlanto-odontoid unit, because the articular facets of the atlas and axis are built for rotation and do not furnish the same bony resistance to anterior

or posterior displacement as the articular processes of the remaining vertebrae. Such patients should be spared unnecessary handling in clinical and roentgen examinations as well as in treatment. Serious or fatal compression of the cord may ensue, therefore axial X-ray views with unavoidable backward extension of the cervical spine should be omitted.

Tingling of the arms is noted in rotation of the skull and neck, probably resulting from additional narrowing of the spinal canal in this movement. Occipital neuralgias are frequent in fractures of the posterior arch of the atlas when the ganglia are pinched by the fragments. As an unusual event laceration of the vertebral artery is reported in fracture of the transverse process.

DIFFERENTIAL DIAGNOSIS

The differential diagnosis of some fractures and dislocations of the upper cervical vertebrae is illustrated in the diagrams and explained in the legends. Skull fractures in the occipital region should be ruled out. For other pathologic changes the history, the clinical and laboratory findings are of equal importance. However for lack of space only those changes visualized by X-rays are mentioned.

Developmental malformations, as asymmetric occipitalization of the atlas, may cause complaints in the period of adolescence and later in mature age; they may be connected with cord and nerve symptoms. Of the inflammatory diseases a retropharyngeal abscess, osteomyelitis, arthritis and above all tuberculous spondylitis should be considered. Destruction of the vertebrae by tumor metastases or by Hodgkin's glands in the neighborhood is rare, but should not be overlooked.

In closing this paragraph it is emphasized that many fractures and dislocations in the upper cervical region produce only minor changes in the roentgenogram. These signs, although not spectacular, are essential for treatment and prognosis. Helpful in their discovery are exact observation and careful interpretation of all deviations from the normal.

TREATMENT

Formerly it was customary to manipulate dislocations of the upper cervical spine in spite of the unavoidable hazards. In recent years skeletal traction has come into use to effect and maintain reduction of these dislocations with and without fracture, because of its greater comfort and effectiveness over the various halters and harnesses.[2, 3] Treatment should be started as soon as adequate facilities are at hand. After a certain period of traction a collar or brace is put on to enable the patient to move about. Breaks in the atlas without dislocation are treated with simple immobilization by sandbags, plaster or Thomas collars. Pinching of the nerves by the fragments, recurrence of a dislocation may call for open operation. Physical therapy is used to accelerate the return of satisfactory function in the later stage.

RESULTS

Death may occur as immediate result of the injury or within the first few days in terminal hyperpyrexia, later with any unguarded movement which leads to a compression of the medulla. In the further course the majority of patients with permanent paraplegia die of ascending urinary infection.

In some series of cervical fractures the mortality is given as high as 70 per cent and, in miners, 87 per cent; whereas for the fractures of the atlas reported since 1900 only 13.9 per cent were found to be fatal.[4]

The determining factors for the recovery from cord injuries in dislocations are: the primary extent of the compression, its duration and possible recurrence; hence the importance of a successful reduction of the spine at the earliest possible moment and of the securing of a safe position.

Fractures of the atlas rarely cause severe sequelae when recognized and treated accordingly, although pseudarthroses are common. Fractures of the axis and third cervical vertebra are also known for lack of callus formation and much depends on the opportunity for the fragments to unite in proper position. Attention should be paid to the condition of the spinal canal and possible later encroachment of the fragments upon the cord. The results of conservative and operative treatment, presence of pseudarthroses, post-traumatic spur formations and ankyloses are checked by consecutive periodic X-ray views.

SUMMARY

For traumas of the upper cervical spine roentgen-examination is indispensable. The deviations from the normal appearance might be inconspicuous. However, they should be carefully looked for and interpreted. The relation of the various parts of the first three vertebrae in some dislocations and fractures is illustrated by diagrams with lines and legends.

19 WEST SEVENTH STREET

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THE EYEGROUNDS IN MENTAL DISTURBANCES

By WILLIAM JOHN HOLMES, M.D., WARREN, OHIO

TO correlate the physical findings with abnormal behavior, to establish an organic basis for mental disturbances, a thorough evaluation of all available diagnostic aids must be attempted.

The ophthalmoscope became valuable in diagnosing diseases of the central nervous system soon after its discovery. More than 70 years ago Hughlings Jackson declared, "The account of a cerebral disease cannot be complete without the record of ophthalmic observations."

In a recent study conducted at the Cook County Psychopathic Hospital of Chicago, the eyegrounds of over 2,000 patients were examined and all variations from the normal recorded. Of these, 20 per cent (400 patients) had demonstrable fundal pathology. In most instances the findings in the fundus could be interpreted as part of the constitutional or cerebral affliction responsible for the mental symptoms.

Mental defectives comprised 1½ per cent of the total number of patients examined (30 cases). Among these we found the following groups:

Congenital syphilis: The fundus picture in this condition revealed many isolated lesions most numerous toward the periphery. The lesions were discrete, circular, of a whitish-yellow color, covered partly by areas of pigment proliferation. The salt and pepper appearance commonly associated with inherited syphilis was found in the periphery of the fundus, in some cases.

Oxycephaly: Most cases of oxycephaly with arrested mental development exhibited medullated nerve fibers. These fibers were usually adjacent to the disc margins. They had a white color with frayed and feathered edges and obscured the vessels which emerged from beneath them.

Lawrence Moon Biedl Syndrome: When retinitis pigmentosa was associated with mental deficiency, deafness, polydactylism, genital hypoplasia and other congenital anomalies, we recognized the Lawrence Moon Biedl Syndrome. The ophthalmoscopic signs included a great diminution in the lumen of the vessels, a creamy-white color of the optic papilla and the presence of irregular pigment spots which were most numerous at the periphery and resembled bone corpuscles.

Mongolism: The fundi presented no characteristic changes, but the appearance of the external eye was rather typical. The palpebral fissures were narrow and oblique; strabismus, nystagmus, blepharitis, ectropion, and chronic conjunctivitis were seen.

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The Author

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Hydrocephalus: Optic atrophy was the only finding on funduscopic examination. Many cases showed no abnormalities whatever in the eyegrounds.

Microcephalus: This condition was in most cases associated with microphthalmus, coloboma of the choroid and optic atrophy. Congenital colobomata were found more commonly in the lower part of the eye than in the portion above the disc. The colobomatous area was white, oval, with clearly defined edges. Retinal vessels were seen traversing the defect.

In other types of mental defectives a pseudoneuritis was often present, characterized by blurred disc margins and tortuous retinal vessels, but without hemorrhages and exudates.

Toxic, infective, and exhaustive psychoses were diagnosed in 3.6 per cent of this series (72 patients).

This group includes:

Epidemic encephalitis: The mental symptoms of this disease frequently do not appear until the postencephalitic stage. Early in the postencephalitic stage we found blurring of the optic discs, and tortuosity of the vessels. In advanced cases varying grades of pallor of the papillae was present.

Alcoholism: All three varieties of true alcoholic psychoses were observed. There was no essential clinical difference between the uncomplicated cases of Korsakoff's syndrome and patients with delirium tremens or alcoholic deterioration. The only finding of any consequence was a bitemporal pallor of the optic papillae found in 20 per cent of the cases belonging to this group.

Pregnancy, puerperium, and lactation: As stated by Williams, "Mild degrees of disturbed mental equilibrium are so frequently observed as to be considered almost physiological". In marked cases of mental derangements the eyegrounds revealed a variety of conditions depending upon the

severity of the toxemia. These ranged from a generalized narrowing of the lumen of the arterioles, with spasm of the retinal arterial branches to retinal edema, irregularly distributed hemorrhages and exudates, and detachment of the retina.

Diabetes: Toxic states associated with disturbances of behavior, due to diabetes mellitus are not very common. Ophthalmoscopic appearances revealed irregularly grouped, sharply demarcated, white spots around the macular region and the posterior pole. Punctate and occasionally larger hemorrhages which were circular in outline were seen in the deeper layers.

Pituitary dysfunction: The mental and ocular symptoms are due to pressure of the enlarged gland on adjoining structures. Ophthalmoscopically primary optic atrophy was noted in all but one patient who presented a bilateral papilledema of four diopters.

Hyperthyroidism: The psychiatric manifestations of Graves' disease are dependent upon the characteristic hypersensitive and emotional constitution of the patient. In the fundus, pulsation of the central retinal artery was observed in some of the more severe cases.

Cardio-vascular-renal disease: "It has been shown statistically that a large proportion of the insane in hospitals and asylums have chronic renal disease", (Sajous). The ophthalmoscopic appearances were characteristic and consisted chiefly of edema, hemorrhages, and exudates in the retina. The disc margins appeared blurred. Papilledema of considerable degree was present. Flame shaped hemorrhages were numerous in the central portions. Exudates appeared as white patches and involved the macula giving rise to the star figure. The arteries were narrow and taut, the veins large, distended, tortuous, and appeared compressed at the arterial crossings.

Pernicious anemia: Mental symptoms as a rule are not marked. In the fundi varying sized flame shaped and roughly circular hemorrhages, a pale lustreless appearance of the retina, and optic nerve-head were found.

Post-traumatic cranial lesions were present in 1½ per cent of the patients (39 cases).

When the eyes were involved, retinal edema, hemorrhage, detachment, and rupture followed. No cases of "commotio retinae" with localized retinal edema were observed. Hemorrhages into the vitreous preretinal hemorrhages, and occasionally hemorrhages into the retina itself were more common. In patients who gave a long standing history of trauma to the head, unilateral primary optic atrophy, proliferating retinitis, and detachments of the retina were seen. In most instances there was no direct proof that the same severe blow to the head, resulting in a hemorrhage into the optic sheaths or the vitreous, also gave rise to the brain concussion responsible for the mental symptoms.

Psychoses of senility: This was the largest group of all those studied. Seven per cent (140 patients) belonged to this classification.

Ophthalmoscopically no distinction could be made between patients with senile dementia and those with cerebral arteriosclerosis with psychosis. The fundus picture was essentially that of retinal arteriosclerosis with exudates around the macular area. These consisted of white, circular, sharply circumscribed, irregularly distributed lesions. At times they formed a star figure around the macula or were grouped together in fan-shaped manner radiating towards the optic disc. The vessels showed irregularity of the light streak, tortuosity, and in extreme cases the arteries appeared as white cords, completely bloodless.

In some of the elderly patients various types of senile macular degenerations, cysts, or holes in the macula have been coincidentally discovered.

Mental derangements caused by tumors of the brain made up .9 per cent of the present series (18 patients).

The outstanding ocular finding was papilledema, which was usually bilateral. The nerve-heads were hyperemic and edematous, with obliterated boundaries and hemorrhages were seen in them and in the surrounding retina. The protruding area was of a grayish color with radiating striae projecting into the adjacent tissues. The veins were dilated and tortuous, the arteries constricted. In long standing cases atrophy of the optic nerve and of the anterior layers of the retina had resulted.

Syphilis of the central nervous system resulting in insanity was accompanied by pathological alterations of the eyegrounds in 5.5 per cent of the patients.

All of the structures within the fundus had been involved though usually not to the same extent in the same patient. In primary optic atrophy the discs assumed a bluish white to pearly white color. Their margins were clear-cut, their surfaces retracted and mottling of the lamina cribrosa was pronounced. In the very late stages the vessels were markedly constricted and thread-like. The finest branches of the central vessels had disappeared altogether. The retina and choroid presented scattered foci of dense black flecks with secondary atrophic changes.

There were 15 cases of glaucoma, three cases of melanoma, and one melanosarcoma, all of which were only of ophthalmologic interest.

The background of the eye offers an easily accessible means to detect changes affecting the vascular and nervous systems as well as local diseased conditions of the eyeball itself.

The retinal vessels provide a reliable source of information of the general state of the vascular

tree. The optic nerve, developmentally an outgrowth of the central nervous system, behaves in disease like all other conducting tissues of the central nervous system.

By routine and systematic fundus examination of mentally disturbed patients, we are in a position to interpret many of the signs of general diseases, diagnose unsuspected intraocular pathology and contribute our share to a better understanding, and earlier diagnosis and more expedient care of the mentally diseased.

SUMMARY

The fundi of 2,000 psychiatric patients have been examined. Four hundred showed ophthalmoscopic changes related to the etiological factors responsible for their psychosis.

106 E. MARKET STREET.

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The Degenerative Goiter Heart

The normal end result of all goiters is death from heart failure. Generally speaking this is as true of Graves' disease as of the nodular goiters. The problem, therefore, in the first place is to determine when a goiter begins to injure the heart, and in the second place what to do about it.

Goiters beyond the age of adolescence may be divided into the hyperplastic toxic as we see it in Graves' disease, and in the degenerative toxic goiters, toxic adenomas or whatever name is applied to them.

A convenient clinical designation is acute and chronic goiter as proposed by Davison. The first group, the acute, is synonymous with the hyperplastic. It is represented by the Graves' type of disease, being attended by marked loss of weight, pronounced nervousness and in some cases by eye signs. These are acute in that they may develop in a few months. Therefore, they are obviously acute in onset. In contradistinction to these is the chronic type which require many years for the development of obvious toxicity. Therefore this lesion may be designated as chronic. It would add much to clinical clarity if practitioners would adhere to this simple classification rather than to try to employ the terms usually used by pathologists.

In the late stage the goiter heart justifies its name. Heart symptoms dominate; arhythmia dilatation, dropsy, is the usual order. The patient has a sense of exhaustion rather than the nervousness of the early stages. The sleep is disturbed. The loss of weight may be slight but it is usually marked. The dropsy may dominate the picture if the heart is in a state of utter decompensation. Many of these patients have been taking digitalis for long periods, despite which they sleep sitting up if at all. The terminal stages are usually those of a progressive heart failure, but sometimes there is a hyperpyrexia.

It may be said in passing that even in the stage of marked decompensation the patient may recover fully after the removal of the goiter. The heart symptoms seem to be due to a poisoning from the goiter rather than to any degenerative change in the heart muscle itself.

It has been demonstrated, let it be repeated, that the total removal of the thyroid gland is not followed by dire results. But why the radical operation? The patients improve satisfactorily after the partial operation, at least in most cases. The reason is that the part allowed to remain may cause a goiter heart to reappear after five or ten or more years. The occurrence of the goiter heart makes it mandatory to reoperate, not a pleasant task to perform and a humiliating thing if the patient presents herself to some other surgeon.

Patients who have once been relieved of a cardiac state are quick to recognize the recrudescence of the symptoms and present themselves for further observation. If an obvious recurrence of a palpable gland is present the problem is simple, but if there is no palpatory evidence of a recurrence most surgeons hesitate to reoperate, possibly because such secondary operations offer technical difficulties.

Perhaps the most common deterrent to a complete operation is the fear of the technical difficulties. The difficulty of doing the radical operation is due to the failure to accurately locate the line of cleavage. This can be done only by sharp dissection and this is possible only when the operator has an exact knowledge of anatomy of the region. This knowledge is easily acquired by a reasonably diligent surgeon in the dissecting room.—Arthur E. Hertzler, M.D., Halstead, Kansas; Southwestern Med., Vol. XXII, No. 4, April, 1938.

The Eye in Diabetes Mellitus

In thus examining the ocular lesions found in diabetes, it is striking that only the changes in the lens can be definitely shown to originate from this disease. The senile type of cataract must be excluded from these characteristic lenticular changes, since only the alterations in the refractive state and the juvenile opacities offer a clear-cut clinical picture. The presence of senile lenticular opacities and of the retinal lesion indicate that diabetics as a whole are much more liable to an early senility than are nondiabetics, although how these factors operate to produce these tissue changes is as yet unknown.—Benjamin Rones, M.D., Washington; Med. Annals of the Dist. of Columbia; Vol. VII, No. 5, May, 1938.

"STROKES" WITHOUT PARALYSIS; PROBLEMS OF DIAGNOSIS

By HARRISON EVANS, M.D. and GEORGE T. HARDING, M.D., COLUMBUS, OHIO

PHYSICIANS, as well as the layman, commonly use the descriptive but nonspecific term "stroke" to designate the result of a cerebrovascular accident, whether the cause is a thrombosis, hemorrhage or embolism. The word implies a sudden and severe attack and is applied to cerebrovascular accidents because they usually occur suddenly. Paralysis, as an outstanding sign, has been so closely associated with the clinical concept of a "stroke" that many hesitate to make a diagnosis of "stroke" or cerebrovascular accident unless paralysis is present. In fact, where the onset of symptoms is such as to strongly suggest a stroke, the diagnosis is often ruled out if paralysis does not follow.

Many actual strokes, referring to cerebrovascular accidents, are mistaken for an acute gastro-intestinal upset, an heart attack, hysteria or some vague clinical entity. Proper precaution in treating the patient may be omitted because of this failure to recognize that "strokes" do occur without paralyses. It is our purpose to call attention to some of the outstanding signs and symptoms which offer as convincing evidence of a "stroke" as a complete hemiplegia.

VASCULAR SUPPLY OF THE BRAIN

A brief review of the blood supply of the cerebrum would probably be helpful. This can be more easily done by the accompanying drawings than by an elaborate discussion.

The drawings illustrate the large areas of the brain which can be involved in small strokes without any paralysis resulting. Also the important centers are outlined so that reference can be made to them in the discussion later on.

PROBLEMS OF STROKES IN GENERAL

(A) Types of Vascular Accidents and Their Incidence.—There are three main types of vascular lesions which constitute a stroke. These three are thrombosis or vascular occlusion, hemorrhage, and embolism. Contrary to the opinion of many, hemorrhage is not the most common type of vascular lesion. It is not unusual for physicians to label all "strokes" as hemorrhage and let it go at that. However, different observers have found that thrombosis is the most common, with hemorrhage and embolism second and third respectively. Courville[1], in a series of 15,000 autopsies, found 569 cases of cerebral thrombosis, 388 cases of cerebral hemorrhage, and 123 cases of cerebral embolism. Aring and Merritt[2] found, in studying 407 cases clinically, that 81.8 per cent of the cases were diagnosed as cerebral thrombosis, 15 per cent as cerebral hemorrhage, and 3.2 per cent as cerebral embolism. In all of the cases a spinal puncture had been done and the diagnoses were reasonably certain. They felt that this was about the correct incidence. They gave as a possible reason why discrepancies in figures arise, that more patients with thrombosis recover and are able to leave the hospital, thus not coming to autopsy as frequently as those with cerebral hemorrhage, the more fatal type.

The reason for stressing the relative frequency of each type of vascular accident is that the physician tends to make a diagnosis of the type of lesion he is expecting. If a hemorrhage is expected which causes greater damage and more spectacular symptoms, it is easy to overlook the comparatively minor symptoms which may occur in cerebral thrombosis.

(B) Symptoms and Findings Relative to Strokes in General.—A brief review of strokes in general shows that there are certain characteristics which are commonly attached to each type of lesion. It is acknowledged that variations may occur. For example, in certain cases, hemorrhage may come on slowly with premonitory symptoms where there is a small leak in a vessel; while thrombosis may have an abrupt and sudden onset without warning, especially, where there is a syphilitic endarteritis. However, there are certain characteristics which will be described upon which a differential diagnosis can usually be made.

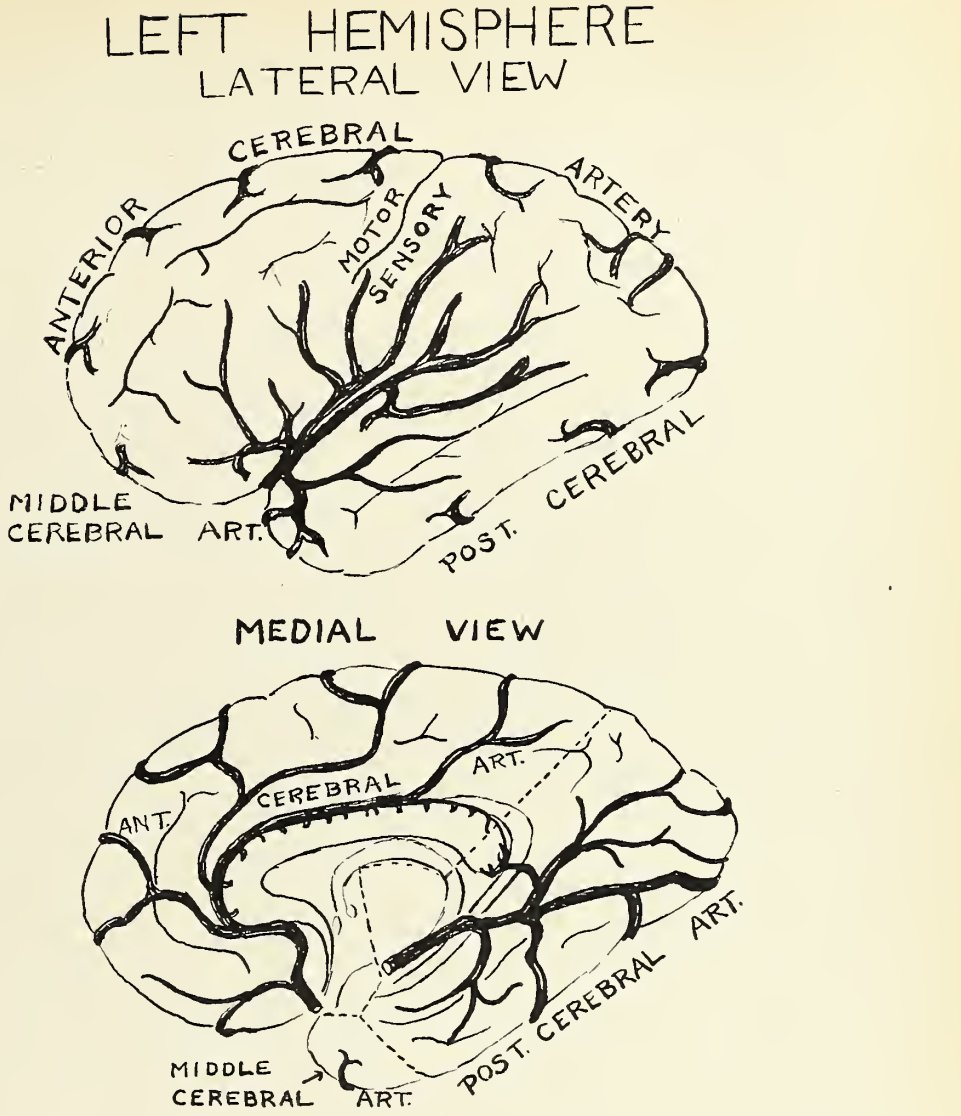
Cerebral hemorrhage is more common in younger[2], and plethoric individuals, in contrast to cerebral thrombosis, which is more common in older individuals, often frail and underweight. Also peripheral arteriosclerosis is a more com-

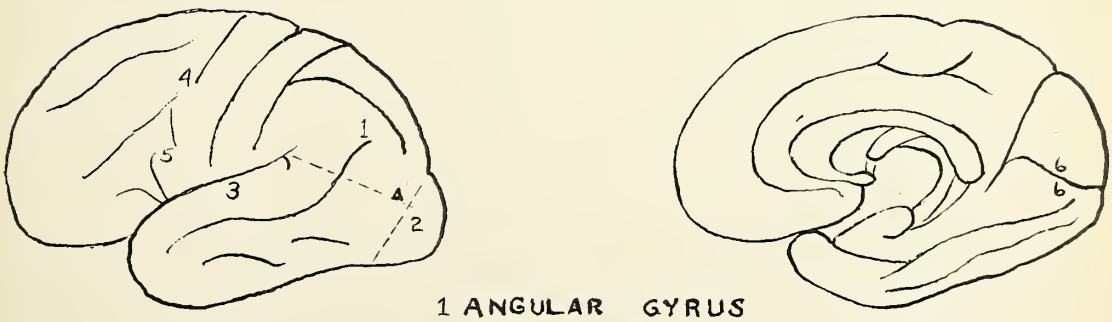
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1 ANGULAR GYRUS
2 OCCIPITAL CORTEX
3 SUP. TEMPORAL CONVOLUTION
4 CENTER OF CONJUGATE MOVEMENT
5 BROCA'S AREA
6 CALCARINE FISSURE

FIG. 2

mon finding in cerebral thrombosis, while the systolic and diastolic blood pressures are usually higher in hemorrhage. Howell[3] stated that thrombosis was likely with arterial disease and low blood pressure, while hemorrhage is uncommon with low blood pressure. Embolism is not necessarily dependent upon arteriosclerosis or blood pressure changes as causal agents. It may occur at almost any age, and is usually the result of rheumatic endocarditis or arteriosclerotic heart disease with auricular fibrillation.

Thrombosis is characterized by a gradual onset with premonitory symptoms of tingling in the extremities, vertigo or embarrassment of speech occurring some time prior to the paralysis, which may begin at one part and extend slowly to a partial or complete hemiplegia[3, 4]. If the lesion occurs during sleep or if convulsions are present, thrombosis is strongly suggested[3, 5]. Sudden hemiplegia or monoplegia in a young or middle-aged individual, when valvular heart disease or hypertension is not present, is likely to be due to a syphilitic thrombosis or hemorrhage.

Hemorrhage, in contradistinction to thrombosis, is frequently ushered in suddenly with vomiting [2, 3, 5, 6], severe headache, and followed by a sudden loss of consciousness with complete relaxation of extremities[4]. Early loss of consciousness which is prolonged means a severe hemorrhage[3].

Embolism may occur at any age and is usually associated with some heart disease. The onset is instantaneous, frequently without warning. It is not unusual for consciousness to be maintained even in a complete hemiplegia. Septic emboli may result in a secondary hemorrhage due to histologic action of the organism on the vessel wall[1].

STROKE WITHOUT PARALYSIS

(A) **Symptoms other than Paralysis.**—Sands[7] after stating that thrombosis is frequently manifested in some motor or sensory disturbance, says, "There are vessels in other regions of the brain that are frequently the seat of thrombosis, and the only clinical manifestations present are subjective complaints of headache, dizziness, or vomiting. These types of thrombosis are probably more common than those that show the classic symptomatology in motor and sensory phenomena."

The most salient factor in such lesions, as pointed out by Alvarez[8], is suddenness of onset in contrast to other illnesses with which it may be confused. Also after an apparently trivial upset, the patient may never seem quite the same, but may be depressed, hypochondriacal, less efficient, full of forebodings, emotionally unstable, and show less interest in his environment or personal responsibilities. As Alvarez[8] so aptly puts it, "A lifetime of perfect health may be terminated at a certain minute of a certain day."

To illustrate this, Alvarez tells of a certain patient who had numerous vague complaints for which he had been subjected to many examinations and tests and had been treated for autointoxication and "colitis" and had been called hypochondriacal and overly worrisome. Finally, after eliciting a careful history as to the mode of onset and progression of the symptoms, as well as noting a slight facial weakness, the conclusion was reached that the cause of the symptoms was cerebral arteriosclerosis with small thromboses.

One of our cases brings out the subtle changes in the personality that can take place following a small stroke. A 59-year-old widow was referred to The Harding Sanitarium December 31, 1937, for examination and opinion. The doctor gave a history of the patient's having fallen down stairs a few days previous which resulted in some injury to the neck, causing pain on motion. For approximately 48 hours after the fall the patient was not very clear but was rather confused and stuporous. The daughter thought the cause of the fall was that the patient had caught her foot on her dress as she was coming downstairs.

However, going into the story thoroughly, it was found that ever since Thanksgiving or thereabouts, the patient had seemed different. The Sunday before Thanksgiving the patient had visited one of her daughters and seemed as alert, vivacious, and interested in things as ever. On Monday evening when she went to bed, she seemed perfectly all right. But Tuesday morning there was a definite change noted. This change was rather intangible, but still definitely noticeable. The patient was a little less alert, not quite so interested in things about her, and her memory was not as keen. This condition persisted until the time of the fall. Following the accident the change was even more marked. It was noted that it was difficult for the patient to carry on a conversation because she could not think of the proper word. The word was recognized if suggested to her, but she could not spontaneously recall it. Also there was a little more untidiness, and at times the patient had soiled herself. She could answer questions, write, and was fully oriented, but these above changes could not be ignored.

The examination revealed a little stooped lady who appeared older than the stated years. Sclerotic changes of the peripheral and retinal vessels were noted, but most important of all, it was found that the tongue deviated to the right consistently and that there was a slight but definite right facial weakness. There were no paralyses of the extremities or reflex changes, but there is no question but that this patient has had at least two small strokes, the latter causing her to fall.

(B) **Focal Signs in Strokes Without Paralysis**—Neilsen[9] states that, "Focal cortical lesions in the human being do in many instances leave signs which can be recognized clinically, and diagnosis can be based on these signs." The following are some of the most outstanding cortical lesions and their signs.

(1) **Thrombosis of the Posterior Cerebral Artery**:—This lesion is not infrequent but is

often overlooked. There is only one constant finding and that is a visual field defect. The visual fibers from the nasal half of each retina cross completely in the optic chiasm to join the temporal fibers of the retina from the opposite eye to be projected together about the calcarine fissure (Fig. II, area VI), of each occipital lobe. For example, in the left occipital lobe about the calcarine fissure there is projected the temporal retinal fibers of the left eye and the nasal retinal fibers of the right eye.

Therefore destroying the projection area of the left occipital lobe does not cause blindness in one eye, but half blindness in each eye. This is known as homonymous hemianopia, or half-blindness in the corresponding halves of each eye. If the lesion is incomplete, only a quadrantic defect may result. The diagnosis of such a lesion can be made only by testing the peripheral field of vision; and if one fails to carry out this very simple test, the diagnosis is always missed.

The symptoms may be meagre or marked. Headache, dizziness, nausea, or disorientation may all be present or absent. If the lesion involves the right posterior cerebral artery, the symptoms may be slight. However, when the lesion involves the left posterior cerebral artery, marked disturbances are likely to arise. Disturbances in the relationship of the patient to his environment, such as a loss of direction, inability to describe former well-known scenes, and inability to recognize objects, may give the patient a lost and helpless feeling and a frantic and panic-like reaction. The following case illustrates many of these symptoms.

P.B., a white female, age 62, was admitted to The Harding Sanitarium January 11, 1938. At the time of admission she complained of pain over the eyes and that she could not see. However, she had commented on the beautiful snow.

The onset of her illness was sudden. Christmas night she retired early because of a cold. Shortly after retiring there developed an attack of coughing which caused her to rise up in bed, and as she turned over, she became sick at her stomach. She went to the bathroom because she had to vomit. She returned to bed and again became sick so that she had to go to the bathroom once more to vomit. While returning to bed for the second time she suddenly noticed that she could not see. Her husband helped her to bed and then called a doctor. The doctor thought she had a stroke. However, after two days' observation he told the folks he did not believe she had had a stroke—undoubtedly because no paralysis or weakness was present. But later a spinal puncture was done, and because the fluid was discolored, the doctor recognized that a stroke had occurred. The patient became so upset that she was brought to the sanitarium.

On admission the patient was extremely confused and most difficult to manage. It was hard to keep her in bed. She seemed to have lost all sense of direction, for she was as likely to fall out of bed as to stay in. She said everything semed criss-cross or crooked, but there was no double vison. Conversation was difficult. Cooperation was so poor that an examination could not be made for several days. Soon after admission, however, it was noted that the patient did not seem to move her eyes to the right, but looked straight ahead or to the left. It was evident that this was not due to a paralysis of any eye muscle, for occasionally she would move her eyes to the right past the midline, but this was much more infrequent than the movements to the left. Also it was noted that she seemed unable to see anything to the right, for when a cup of water was given to her, it had to be placed directly in front or to the left. Because of this a right visual field defect was suspected.

About one week later the patient became sufficiently adjusted so that an examination and study could be made. It was found that a right homonymous hemianopia existed which proved conclusively that a stroke had occurred and that the lesion involved the left posterior cerebral artery. Further study revealed that the patient could understand anything said, as well as recognize objects, words, figures and colors if placed in the left field of vision. She could write and she could calculate quite well. In former years she had done a great deal of reciting, so we requested her to recite Lincoln's Gettysburg Address, which she did in part fairly well. Because so many normal functions were present, one wonders why such confusion existed; but this is readily explained when it is known that the patient found it difficult to judge distances, impossible to tell the direction, to describe places where she had lived, or to tell how to go to one city from another even though she had traveled between the places in question many times. These losses were accompanied by an amnesia regarding the place where she last lived, the occupations of her children, and even their location. Most of all, this lesion had seemed to make her obvious to the faculties that were still preserved, and mindful of only those lost, so that she felt frantic, confused, and panicky. Her reaction, we know, was not due to an intellectual loss, for as noted above, she could do many things requiring ability to think and even concentrate; but her trouble resulted from a rather typical and specific loss characteristic of this lesion.

(2) **Hemorrhage Into the Thalamus**:—a small hemorrhage into the external nucleus of the thalamus produces a definite syndrome first described by Roussy[10]. The syndrome is characterized primarily by spontaneous "central pain,"—so-called "central" because it arises from within the central nervous system rather than from the peripheral components—on the entire half of the body opposite to the lesion. This is the essential characteristic. Sensory disturbances may occur, such as loss of pain, temperature, and position sense. These may all be lost, or pain and temperature may be lost, with position sense preserved, or position sense lost with preservation of pain and temperature[11]. When position sense is lost, marked ataxia results on the affected side only. Holmes and Head[11] pointed out that even with a loss or diminution of pain sense, there is a tendency for certain stimuli, generally of an unpleasant nature, to produce more pain and discomfort on the affected side than on the normal side. Paralysis may be present, but is not essen-

tial for the symptoms. Visual field disturbances of a homonymous hemianoptic type may occur if the lesion extends back far enough to catch the visual pathways as they pass to the pulvinar of the thalamus. Choreo-athetoid movements may be present, and when they are, it is highly characteristic of this lesion[11] and corpus striatal disease.

Unilateral Parkinsonism with tremor and rigidity without paralysis may occur following a stroke involving the region of the basal ganglia.

(3) Lesions of the Temporo-Parieto-Occipital Region:—Cortical lesions of this region on the right side in right-handed individuals are not likely to give focal signs, for this is a relatively silent area. If the lesion is fairly large and involves the sensory area in the parietal lobe, disturbances of sensation may occur on the left side of the body, such as a dulling but not complete loss of the perception of pain, temperature, and touch. An inability to recognize objects by touch alone, when other forms of sensation are intact, except possibly tactile discrimination[12], may also occur. This condition is called astereognosis.

In contrast to these minor disturbances that may occur with lesions on the right, very great and disabling defects may result when the lesion involves this region on the left in right-handed individuals. The left hemisphere in right-handed persons is of major importance for speech and as a guiding influence for many other functions of the body. (In left-handed persons the right hemisphere is of major importance, so that lesions on the right side in these individuals would have the same significance as lesions on the left side in right-handed persons).

The major defects that may result in lesions of the major hemisphere (usually left), are (a) an inability to read when all other faculties are intact, (b) an inability to recognize objects, (c) an inability to think of the name of objects or people although the appropriate name is immediately recognized as soon as it is suggested, (d) an inability to understand spoken words although the hearing is unimpaired. All of these may occur together, and when this is the case, the disability is so great that it is obvious that a serious accident has occurred. However, when these defects occur singly as the result of circumscribed lesions, it is easy for them to be overlooked.

When the inability to read occurs as a single defect, the lesion is usually small and circumscribed and is located in the angular gyrus (Fig. I, Lesion 1). When the single defect of being unable to recognize objects occurs, the lesion is likewise circumscribed and involves the occipital lobe somewhat posterior and inferior to the angular gyrus[13] (Fig. I, Lesion 2). However, if the lesion is fairly large, and if both areas—the angular gyrus and occipital cortex—are involved, both of these defects result and this constitutes mind blindness.

The inability to think of the proper name for objects or persons usually indicates that there is some lesion in the major temporal or parietal lobe or both[14]. This symptom occurs frequently in elderly people with cerebral arteriosclerosis, and it may be fleeting or quite permanent. When it occurs it signifies that some alteration in the cerebral circulation has taken place—usually in the form of a thrombosis in the regions mentioned above.

The inability to understand spoken words occurs when the cortex of the middle third of the superior temporal convolution on the major side (usually left) is damaged or destroyed[15] (Fig. I. Lesion 3). Because the ability to comprehend spoken words is suddenly lost, the patient is seriously handicapped in contacting others. The patient not being able to check his own words, often uses the wrong word, and is frequently voluble and euphoric[16]. The whole picture is bizarre and confusing, and since the symptoms frequently subside within a few days, the patient may be suspected of having had an acute mental upset, as no trace of organic involvement is left.

Conjugate deviation of the eyes and head may be helpful in states of coma or unconsciousness when the diagnosis is doubtful because no change in reflexes or paralysis can be demonstrated. When deviation of the eyes and head occurs, one can be sure that there has been some involvement of the centers for conjugate movement of the eyes in the frontal or occipital lobes[16] (Fig. I. Lesion 4). In paralytic lesions the eyes deviate toward the side of the lesion and away from the paralyzed side; while in irritative lesions the deviation is away from the lesion and toward the affected side. Lesions in the pons in the region of the sixth cranial nerve nucleus will also cause conjugate deviation of the eyes. Because of the proximity of other structures, other signs of a stroke usually appear in this latter lesion.

Broca's aphasia—inability to speak—is such a well recognized entity that little attention need be given it. See Fig. I. Lesion 5, for its location in the frontal lobe. This may occur with little or no paralysis, but usually at least a monoplegia accompanies it.

Emotional instability, untidiness, and even incontinence in the absence of evidence of gross cerebral involvement, usually indicate a frontal lobe lesion.

SUMMARY

A "stroke" may result from any one of three types of vascular lesion—thrombosis, hemorrhage or embolism. Thrombosis is much more frequent than hemorrhage or embolism. Because thrombotic lesions frequently involve the small cerebral vessels, relatively minor symptoms and signs

may occur such as dizziness, nausea, vomiting, headache, personality disorders, and memory defects. In fact, these are more likely to occur than paralysis or disturbed consciousness.

Lesions involving the left hemisphere in right-handed individuals may result in focal signs which are highly diagnostic, even if no paralysis is present. For example, the inability to recall spontaneously words which are immediately recognized when suggested, indicates a lesion in the left temporoparietal region. Inability to read or to recognize objects when the vision is unimpaired indicates a lesion in the region of the angular gyrus and the left occipital cortex. Word deafness may result from a small vascular lesion involving the left superior temporal lobe, even though the hearing itself is unimpaired.

It is not usually recognized that one of the three main vascular trees to a hemisphere may be completely occluded and no paralysis or reflex changes result. This particular vascular tree is the posterior cerebral artery which supplies the medial surface of the temporal and occipital lobes. The only constant finding in such a lesion is a visual defect. For this reason it is always important to test the visual fields in suspected vascular accidents.

An accurate history of the onset and progress of the symptoms in any illness is always of great value, but in such obscure cases where the possibility of a vascular lesion is involved, it is extremely important, and may be the only way in which a correct diagnosis can be reached.

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Thyroid Disease

Knowledge that iodine will produce a remission in the course of hyperthyroidism, has led the public and the profession alike into extraordinary misapplication of this information.

The maximum benefit from the use of compound solution of iodine is obtained in from ten to fourteen days, a fact so well-established that it need only be mentioned. It does remain to show that long-continued use of the drug in hyperthyroidism is responsible for increased morbidity and elevated mortality in goiter surgery. Increase in morbidity is difficult to express adequately, but experience teaches us dearly that those patients who have received iodine before preparation for surgery are more dangerous operative risks. There are so many variables in the stay of any one patient in hospital that comparisons suffer accordingly, nevertheless, in comparing two groups some enlightening facts are found. Those patients that received iodine before admission had a slightly longer hospital stay than the group that first received iodine as a preparation for surgery. The average pulse drop of the iodinized group was ten points less than the control group. Weight change in those already taking iodine averaged a loss of three pounds preoperatively while the other group averaged a weight gain of one pound. There were more two-stage operations necessary to insure safety in the group receiving iodine before hospitalization.

Means has likened the temporary improvement obtained by iodine, to applying the brakes on a fast moving car while the accelerator is still open. The disease is only slowed in its progression and not cured. More recently Wetherell and Groat have drawn our attention to the fact that not only is the economic loss to the patient greater when there is a medical attempt to cure hyperthyroidism by iodine, but more important, the morbidity is markedly increased. These authors show that most of the one per cent mortality of the experienced surgeon is due to large substernal, and long neglected toxic goiters, not a few of which have been made iodine fast by too long medication. With regard to prescribing iodine Wetherell and Groat say "that the importunings of the patient should influence the judgment of the physician is inexcusable. That 'another will if I do not' is even more questionable logic." With more widespread recognition of the truth of these warnings will come a marked drop in the morbidity of, and mortality from thyroid disease.—George E. Beilby, M.D., and John C. McClintock, M.D., Albany; N. Y. State Jr. of Med., Vol. 38, No. 10, May, 1938.

NASAL ALLERGY ASSOCIATED WITH OTHER ALLERGIC MANIFESTATIONS

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THE management of patients with nasal allergy presents a problem which in more than half of the cases also concerns the consideration of other manifestations of allergy. In less than 50 per cent of the cases the nasal symptoms represent the only manifestation present. Respiratory allergy, such as perennial nasal allergy, hay fever, allergic bronchitis and asthma, is, therefore, frequently complicated by the occurrence of other accompanying manifestations, such as allergic headache, gastro-intestinal allergy, angioneurotic edema, eczema, or urticaria. In some instances these complicating manifestations may have existed before the onset of the respiratory symptoms. In general, the incidence of nasal allergy among all nasal patients observed in otolaryngologic practice is about 35 per cent. Among 216 patients with chronic nasal conditions, Mullen reported the incidence of nasal allergy at 30 to 35 per cent.

In 220 cases of nasal allergy in adults, Hansel[2] noted the following incidence of other manifestations: Gastrointestinal allergy, 55 per cent; headache, 43.67 per cent; asthma, 23.5 per cent; hay fever, 27.7 per cent; urticaria, 26.7 per cent; eczema, 12.3 per cent; angioneurotic edema, 18.2 per cent; and bronchitis, 10.9 per cent. In only 36, or 16.4 per cent, was there an absence of a history of other manifestations. In 55, or 25 per cent, manifestations appeared in infancy and childhood. Rinkel[3] made an analysis of etiologic factors in 75 children (25 with asthma; 25 with hay fever; 25 with nasal allergy) as compared with those in a similar group of adults. He found that children showed a higher incidence of sensitivity to animal danders and pollens than adults. The latter group, however, showed a higher incidence of food allergy. Thus, his findings do not support the assumption that has been made that food is a more common cause of allergic disease in children than in adults. In 200 cases of nasal allergy in children, Hansel[4] found the incidence of other manifestations as follows: asthma, 69.5 per cent; gastrointestinal, 33.5 per cent; hay fever 25.5 per cent; angioneurotic edema, 6 per cent; and bronchitis, 4 per cent. In 181 cases of vasomotor rhinitis caused by foods, Eyerman[5] found multiple sensitivity the rule, and that the most frequently eaten foods predominated.

Among 305 cases of allergy in children and adults, Bray[6] reported the incidence of other manifestations as 42 per cent. In 90 cases of allergy due to molds, Feinberg[7] found that 26 patients had nasal allergy as the only complaint; 9 patients had asthma and 55 had both nasal allergy and asthma. Mold allergy alone was present in 25. Only 7 patients had an associated allergy other than pollen, while 58 patients had definite pollen allergy. It is interesting to note that 70 of his patients were between the ages of 1 and 10; 11 between 11 and 20 years; 7 between 21 and 30 years; none between 30 and 50 years and one each in the next two decades.

Submitted April 19, 1938.

The Author

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CASE REPORT

The following case of nasal allergy is presented in detail in order to emphasize the importance of considering the various manifestations of allergy and to show that relief could be obtained only by allergic management:

J. D. White female, age 35 years: The first manifestations of allergy appeared in infancy as eczema. She was apparently free of allergic symptoms until 1921 at which time she complained of nasal obstruction. She consulted a physician who told her that both sides of her nose were obstructed by polypi. They were removed. She was sympton-free until the summer of 1924 when she developed ragweed hay fever. The symptoms continued after the season with rhinorrhea, nasal obstruction and headaches. The patient received almost daily local treatments throughout the winter and spring with no relief. In June, 1925, bilateral turbinectomy and intranasal ethmoid operations were performed. No relief was received from this procedure. The hay fever was very severe the next three years. The patient continued to have perennial nasal obstruction and pain over the left cheek and temporal region. In 1926 she changed physicians again and at this time as X-ray of the paranasal sinuses showed a cloudiness of the left antrum and ethmoid. The left antrum was irrigated and pus obtained. An intranasal antrum and an ethmo-spheno-frontal operation were advised and performed. Following these procedures the patient had a stormy convalescence. About two weeks later tonsil tags were removed. There was no relief from the pain around and behind the eye. She continued to have local treatment and irrigation of the left antra which invariably showed globules of glary mucus. This procedure would

relieve the pain for a period of several hours (probably due to cocainization). The summers of 1927-31 were spent in Denver to avoid Hay Fever, but during these years she continued to have severe pain. Many rhinologists were consulted and many remedies were tried with no improvement. In August, 1930, the patient received a thorough medical examination, including a basal metabolic reading, Wassermann, and a complete blood count, but nothing abnormal was found. Lipiodol was instilled into the left antrum and it showed no filling defect. During the summer of 1931 she remained in Cincinnati, but did not have hay fever. It has not recurred since that date. She continued, however, to have pain on the left side of the head which was of two distinct types; the most severe, a Vidian type, could be controlled by cocainization of the spheno-palatine ganglion; the second, a dull type, was not affected by cocainization. In 1931 she began to have fullness and deafness in both ears which were relieved temporarily by Eustachian tube inflations. She continued to have this treatment periodically until six months ago.

In 1933 scratch tests for the spring grasses and the weeds were negative. In 1934 she began to have typical attacks suggestive of migraine with eye symptoms, coming on about every two weeks. These were accompanied by cough and shortness of breath. The attacks continued in conjunction with profuse mucoid discharge from the nose, fullness in the ears and left-sided head pains, until June, 1937. At this time the above history was obtained. The nose showed that extensive surgical procedures had been performed; the mucous membranes were pale, a great deal of scarring was present, and there was considerable thick mucus lying on the floor of both sides of the nose. The tympanic membranes were retracted; the pharynx was dry and red as a result of poor nasal function following the extensive surgical procedures. Repeated nasal smears showed significant number of eosinophiles. The left antrum was irrigated and a large glary globule of mucus was obtained which also contained a large number of eosinophiles. Intracutaneous tests showed slight reactions to egg yolk and asparagus. There were no reactions to the pollens in 1-1000 dilutions. Leucopenic indices were done for the common foods, and a marked sensitivity to egg, potato and chocolate was demonstrated. By diet trial it was later discovered that oatmeal and sweet potato were offenders.

Following the elimination of these foods, the symptoms of headache, rhinorrhea, fullness in the ears and asthma (for which she had over 500 treatments and considerable nasal surgery in 11 years) disappeared. During the Christmas holidays, the patient developed asthma following the ingestion of eggs. The asthma was relieved by the injection of adrenalin. Since this time she has tried ingestion of egg and chocolate with untoward results. The reactions were very interesting in that ingestion of eggs was followed shortly by asthma, but the ingestion of chocolate was followed by marked nasal symptoms, rhinorrhea, nasal obstruction and headache, with only a moderate sensation of tightness in the chest.

DISCUSSION

Too much emphasis cannot be placed on the value of the determination of the cytology of the nasal secretions. Nasal smears should be prepared from all patients with nasal complaints and should be repeated at each office visit. By demonstrating the presence of eosinophiles, these cytologic studies are an aid in making a diagnosis of nasal allergy. According to Hansel, who has examined more than 10,000 smears, the demonstration of numerous eosinophiles in the nasal secretions is diagnostic of nasal allergy. In the mucoid stage of acute rhinitis, large numbers of neutrophiles are found. Under allergic management, experience has shown that many nasal operations can be avoided, for it is not uncommon for polypi and edema of the mucous membrane with postnasal drip to disappear. On the other hand, if there is a definite persistent infection present, it may be necessary to estabilsh ventilation and drainage of the affected sinuses by surgical means before satisfactory results are obtained. Nasal surgery has fallen into disrepute because attempts have been made to obtain subjective relief by repeated and extensive nasal and sinus operations. Edema of the mucous membrane is characteristic of nasal and sinus allergy and it recurs on regeneration of the membrane unless allergic management is instituted. By means of diet trial it has been demonstrated that one food may cause one symptom and another food a different symptom. As noted by Gay[7] and as demonstrated in this case, one food may cause symptoms in several organs. Rinkel[8] has found that foods may produce symptoms only during the hay fever season and states that failure to eliminate these foods is the cause for many failures in the treatment of seasonal pollinosis. The part played by environment and occupational dusts can often be determined on the basis of the history alone. The relief of symptoms following the injection of an extract of dust is often dramatic. Striking effects may be noted after the initial injection. Following the elimination of the offending allergens in nasal patients, Gay states "Swelling of the mucous membranes, mucus discharge and cough disappear with the elimination of allergens, but the immediate improvement in general health seems to indicate there has been a removal of an underlying toxic condition as well as by the removal of tissue reactions."

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CUTANEOUS ANTHRAX IN MAN

By JOHN S. KIESS, M.D., BUCYRUS, OHIO

ANTHRAX is also known as splenic fever, charbon and wool-sorter's disease. The Greek translation is, a live coal. The disease manifests itself in the external and the internal forms. In animals, anthrax is chiefly found in sheep and cattle and less frequently in horses and hogs. The cutaneous lesions are infrequently seen in animals; the disease usually assumes the characteristics of an acute septicemia. Man is inoculated by fomites, diseased animals or carcasses of animals having died of anthrax, and by laboratory experimentation. According to the Ohio State Department of Health this is the second case of anthrax in man in this state during the past ten years, one case having been reported in 1937.

The causative agent is the Bacillus anthracis. It is a non-motile, rod-shaped organism which has a variable length of from 2-25 microns. These rods are often united in chains. The bacilli are readily destroyed by steam, but the spores are resistant and survive after being treated with steam or phenol for long periods of time. Soil, which has been the recipient of anthrax spores, remains a source of contagion for months.

CASE REPORT

J. K., a 32 year old white man, was employed as care-taker for a stock farm. He had been in contact with sheep, cattle, horses, and hogs. His health was good until 1-22-38. At that time he noticed a small papule on the dorso-lateral aspect of the left forearm. There was a moderate amount of pruritus present. In the next several days the papule became a pustule and began to increase in size. Concomitant with this progression of the lesion there were several small vesicles presenting themselves around the pustule. Instead of pruritus being the outstanding symptom now a burning sensation was noted. He first consulted the writer 1-31-38, believing that he had a ring worm infection.

The first time the patient was seen the lesion appeared as follows: The area involved measured 5 centimeters in diameter and was raised from the adjacent skin approximately 1.5 centimeters. The center portion of the pustule was necrotic and many sinuses were present which were discharging a seropurulent material. The area surrounding the lesion was circumscribed and brown in color. There were several small vesicles located lateral and proximal to the pustule. The skin and subcutaneous tissue were edematous for 8-10 centimeters from the lesion. There was considerable tenderness present with lymphangitis extending to the axilla. The axillary nodes were 2-3 centimeters in diameter and quite tender. The patient's temperature was 100.4 degrees F.

Course:

The initial treatment was started 1-31-38, which was nine days after the inception of the disease. The days given below will be numbered from this date rather than from the onset of disease. Treatment for the first ten days consisted of bed rest, elevation of the arm, and hot compresses from the fingers to the axilla. The temperature remained at 100 degrees F. for three days and gradually subsided to normal. The lymphangitis had disappeared by the third day. The lymphadenitis persisted until the sixteenth day. There was practically no change in the picture of the lesion until the ninth day. At this time there was a new lesion developing about 4 centimeters from the original; and according to the patient the incipient stages were identical.

On the eleventh day of treatment, Lederle's anti-anthrax serum was administered. Ten c.c.



1. Photographs taken 19 days after the first evidence of disease.

The Author

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The laboratory experiments were done under the supervision of Mr. J. Robert Beck, technician at Bucyrus City Hospital. The photographs were taken by a colleague, Dr. Russel J. Caton.

Submitted April 7, 1938.

were given subcutaneously around the pustules. The patient complained of some pruritus the following day but no untoward reactions were noted. The local reaction of the serum about the lesions subsided and the amount of drainage from the sinuses diminished remarkably. On the fifteenth day it was decided to repeat the anti-anthrax serum. Ten c.c. were again given subcutaneously. Before injecting the serum a second photograph was taken, the result of the first serum can be seen in this picture.

There was some edema of the hand and forearm the following day. This was relieved by hot compresses. The amount of drainage in the next four or five days amounted to about 1 c.c. in 24 hours. By the end of the 25th day of treatment there was no drainage.

The sinuses were represented by small umbilicated scars. The lesion was a bluish-red in color but the edges were level with the adjacent skin. The smaller lesion which was aborted with the serum remains a brownish color. At this writing we believe the disease is quiescent.

Laboratory:

Urine examination was entirely negative. Blood Wassermann was negative. White blood count



2. Photograph taken four days after anti-anthrax serum was administered.

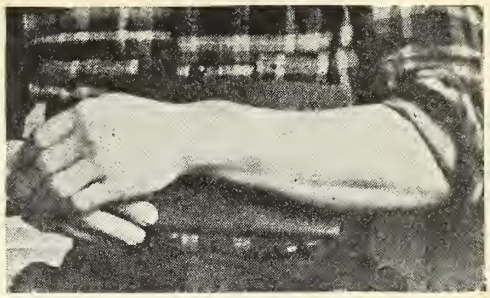
was 16,000. Differential showed 70 per cent polys; 8 per cent monocytes; 20 per cent lymphocytes and 2 per cent eosinophiles. Blood culture revealed no growth.

Cultures:

A plain agar plate was streaked with the pus which exuded from the lesion on 2-2-38. Smears were obtained at the same time and stained with methylene blue. The direct smears revealed the organisms which were suspected of being anthrax bacilli and many spores. In 48 hours the plate contained several colonies from which slides were taken. These were typical staphlococcus organisms. On the sixth day of growth there was one large colony with a brown, firm, tenacious film. A smear from this colony showed the spores of anthrax. A tube of nutrient agar was inoculated and a good growth was obtained in four hours. This culture revealed the organisms as they appear in the first photomicrograph.

RESULTS OF ANIMAL INOCULATION

Rabbit A was inoculated intravenously with the washings from the tube of nutrient agar, the organisms being shown in the first photomicrograph, on 2-16-38. By 2-20-38 the rabbit became apathetic. Diarrhoea started on the fourth day and persisted until death. On 2-22-38 a paralysis of both upper extremities was noted and death occurred the same day. Autopsy showed a lack



3. Photograph taken 10 days after the second administration of anti-anthrax serum.

of rigor mortis. The blood was black and not coagulated. All organs showed marked swelling and numerous small hemorrhagic areas. The spleen was quite tense and engorged with blood. Smears were taken which showed the organisms of anthrax. Heart culture revealed no growth in five days.

Rabbit B was inoculated intravenously 2-18-38 with a saline washing of a culture containing spores. This rabbit developed a diarrhoea on the fourth day but no other symptoms were noted. At the end of 12 days the stools returned to normal. The animal at the end of 20 days appeared normal.

Rabbit C was inoculated subcutaneously in the anterior abdominal wall 2-21-38 and died 2-28-38. Diarrhoea and paralysis were noted as in Rabbit A. Autopsy showed a large caseous mass located just below the site of inoculation between the peritoneum and the external oblique muscle. Organisms were recovered from this material. The organs appeared as did those in Rabbit A, with the exception that no hemorrhage was seen in either lung.



A. B.

4. Photomicrograph A shows the organisms from a four-hour culture on nutrient agar. Photomicrograph B reveals the organisms taken from glucose agar at the end of four days.

SUMMARY

There is considerable disagreement among various men as to the proper way to treat cutaneous anthrax. Some believe the immediate incision and undercutting of the flaps as in the treatment of carbuncles should be done. Others advise that if this procedure is followed it is likely that a fatal septicemia may ensue. The use of the serum subcutaneously in this case worked well. The conservative method of hot compresses, elevation, and rest neither improved the lesion or prevented the beginning of a new pustule. No serum was given intravenously because the blood culture was negative and the general picture did not represent a septicemia.

ANALGESIA AND ANESTHESIA IN OBSTETRICS

By JOHN A. FRASER, M.D., East Liverpool, Ohio

MANY procedures and forms of therapy for the relief of pains in childbirth have been attempted since 1847. At that time [1]Sir James Simpson, in order to convince women that it was right to submit to anesthesia for relief of labor pains quoted the biblical story of how "God put Adam into a deep sleep to create Eve", while at the present time, men and women, who in most cases have not experienced nor witnessed childbirth, fill pages of our popular magazines with stories of painless childbirth; and imply that unless the prospective mother is unconscious throughout her labor, her physician is absolutely uninformed in modern obstetrics.

Safety, conservatism and caution are the important principles in the practice of obstetrics, and certain requirements must be demanded of any procedure used to eliminate the pain of labor. It must be relatively safe for mother and child, efficient in abolishing pain, a true analgesia, not amnesia, and it must not be too complicated. The patient should be able to actively and voluntarily cooperate during the second stage of labor. Who is not thrilled at the first cries of the normal, undrugged newborn child, when it reaches the stimulating influence of the air? Our aim should be to deliver the child in that condition, and at the same time prevent nervous shock, and physical exhaustion to the mother.

According to [2]Read, in Natural Childbirth, fear is the principle cause of pain in labor; uterine function should not be essentially painful, and the discomfort of labor not intolerable. Labor pain is intermittent, lasts but a limited time, and is followed by natural amnesia; in this respect it differs from pathologic pain, a fact generally understood by the patient, and deserves greater recognition by the physician. When the question of pain is raised we should assure the prospective mother that she will be given all relief necessary for her, that is compatible with the safety of her child; convey to her the idea that drugs are not always harmless to the baby, and few women after going through nine months of pregnancy will knowingly allow any method of relief to be given, which would cause injury or loss of her baby.

The keynote of the successful management of labor lies in the conscious participation and cooperation of the patient; she should observe her contractions, and keep a record of them, while they are mild; if taught that long hard contractions are the ones that will accomplish the birth of her child, she will wait for the good contractions, and discount the occasional light ones.

Submitted March 30, 1938.

The Author

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During the first stage, the physician should preserve as long as possible the elation which the patient experiences in anticipation of the coming baby: he should guard against fear and exhaustion, by cheerful confidence and assurance that all is well and by encouraging relaxation. When necessary, give analgesia of sufficient quantity to dull activity of the mind, relieve pain, and produce rest, rather than unconsciousness. With the beginning of the second stage of labor, the feeling of futility is gone, the patient concentrates with deliberation on the task to be accomplished. In spite of the more painful contractions, resolution and courage take the place of resignation. Inhalations of a suitable anesthetic can now safely be administered to relieve the pains, and make easier her full cooperation in the expulsion of the child.

PAIN

In order to become adept in the use of analgesia, a study of the types of pains is essential. False pains, where a long period of agonizing pains occur, with relatively poor and utterly ineffectual contractions; probably because of faulty nerve stimulation, and incoordination of the uterine musculature; in which[3] the three layers of uterine muscle fibers are not coordinated in action, and small isolated groups contract independently; there is irregularity of incidence, rate of intensity and length of contraction present. An occiput posterior position also often manifests itself by the type of contraction present, quite regular incidence but very irregular intensity, and length of contraction, with pain out of proportion to the degree of contraction present.

True labor progresses regularly, as the duration of intensity of the contractions increase, the interval is progressively shortened.

In the incoordinated types of labor, with no

progress, the patient should be put to rest before she becomes exhausted, allowing periods of labor and rest until a regular progressive type of labor pain sets in.

The report of maternal mortality for New York City Academy of Medicine states that the use of analgesics and anaesthetics has increased very materially the rate of operative interference, and has therefore been a major factor in preventing a reduction of the high maternal mortality in this country. Nor can they be overlooked as cause for many infant deaths, which occur during and soon after delivery; according to Price,[4] all barbiturates act alike qualitatively, differing only quantitatively; and liver damage is apparent in many infant post mortems following barbiturates and rectal ether; also as a cause for atelectasis and pneumonia, as a result of a depressed respiratory center, due to interference with oxygenation of the infant's blood during labor and delivery, and to narcosis brought on by excessive use of analgesics in the mother during labor. Psychiatrists intimate too, that some of the nervous instability in childhood behavior may be in part attributable to the effects of drugs used during pregnancy and labor.

When relief of pain is essential during the first stage of labor, morphine should be the pillar on which to lean. I am certain if we as obstetricians were detailed as much by high powered salesmen, on the benefits of opiates as we are on barbital derivatives, there would be far greater use made of it.

Alexander Simpson, a nephew of Sir James, is given credit for first use of opium in labor, having left some opiate tablets presumed to be ergot, for a woman with inefficient pains; while waiting for the expected call he determined his error, and returned to find her asleep, from which she awoke much refreshed, followed by normal labor pains, and a spontaneous delivery.

DeLee states narcotics may affect the child adversely when given during the second stage of labor, but only when the drugs are improperly administered, and in doses that would endanger the mother. If given at proper time, and in proper dosage the child is not in danger.

Morphine depresses the brain, especially the higher functions; there is diminished sensibility to lasting impressions such as pain; it allows the patient rest, overcomes a spastic cervix; it is quieting, more restful, and efficacious in long labors. Its effect may be augmented by judicious use of scopolamin which produces a certain amount of cerebral depression and hypnosis. It does not inhibit, and may stimulate uterine contractions; while it may to some extent depress the respiration, I have not witnessed its reported cause of excitement and temporary insanity. Although more painful to the patient, a 50 per cent magnesium sulphate solution prolongs the action of morphine. Morphine gr. ⅛ to ¼, dependent on weight of the patient, together with gr. 1/150 scopolamin is given when pains become severe, and cervix is 2-4 cm. dilated, and estimated delivery two or more hours away, repeating the scopolamin, as the effect wears off, prolongs the analgesia; with an occiput posterior, a rigid cervix, or for other reasons where labor is prolonged, the morphine also must be repeated, as the severity of pains and progress of labor requires it.

For relief of pain in incoordinated labor pains, with rigid cervix during early stage 1 c.c. of a 1/1000 adrenalin chloride solution may be given with considerable relief, or the new anti-spasmodic syntropan[6] (Roche) repeated at one and one-half hour intervals, has proved effective.

The barbiturates, synthetic derivatives of urea, have in recent years become popular; the multiplicity of preparations and variations bespeak their inadequacy. The individual susceptibility to them makes it impossible to determine the poisonous dose; as Sollman[5] has pointed out, they cause a fall in blood pressure, a depression, or even paralysis of respiration, fall in temperature, even to coma and asphyxial convulsions, with failure to respond to stimulants. There excretion is slow, and the continued administration may produce serious cumulative effects. They should not be used in any respiratory infection, nor after the patient has eaten, because of danger of aspirating mucus or vomitus.[7] Their effectiveness in labor depends upon their ability to produce forgetfulness (amnesia) but with that is the great disadvantage of restlessness, difficult to control, so that the patient cannot be left alone, or must be restrained; as a result, when the time for actual delivery approaches confusion increases to such an extent that a careful surgical preparation is impossible, with the patient in constant danger of injuring and contaminating herself, consequently even in the hospital with trained personnel they may prove dangerous to the mother, as well as to the child, as previously stated.

With the prospective mother brought to the second stage, cervical dilatation at or near completion, the anaesthetic of choice should be given with each pain. Chloroform comes nearest the ideal requirements; my experience with it has led from the Allegheny General and Elizabeth Steele MaGee Hospitals of Pittsburgh, Pa., where it is not permitted in the delivery rooms, to the Royal Infirmary and Royal Maternity Hospitals of Edinburgh, Scotland, where it is used almost routinely; and in the greater part of almost one-thousand deliveries in private practice. A few drops, 10 to 15, on the mask as contraction starts; advise the patient to take a few deep breaths, then bear voluntarily with her contractions. It

HOSPITAL CASES								HOME CASES							
ANALGESIA	Cases	Delay or un-co-op. Labor		Delayed Resp. of Baby		Loss of Baby		Cases	Delay or un-co-op. Labor		Delayed Resp. of Baby		Loss of Baby	
		No.	%	No.	%	No.	%		No.	%	No.	%	No.	%
Morphine and Scopolamin	41	0		2	0.5	2	0.5	21	0		4	20.	0	
Sodium Amytal	21	11	52.	1	5.0	3	14.5	15	7	46.	3	20.	2	15.
Nembutal	16	4	25.	1	5.5	1	5.5	16	10	62.	0		4	25.
Seconal or Seconal with Morphine S.	0	0		0		0		2	1	50.	0		2	100.
No Analgesia	22	0		0		0		144	0		0		1	0.7
		4 premature infants died—not classified							2 macerated—not classified					

is definitely beneficial; if the patient and quantity of anesthetic be gauged accurately, she may sleep a short interval before she is roused by the next contraction. As time for recovery of reflexes is not long (Lundy; Mayo Clinic), she is not so deep but what she readily reacts, if the mask is removed from her face. The contractions are not inhibited, but rather improved, because pain is relieved. The equipment is easily carried in your case to any home.

Ether, also readily available, acts too slow to relieve individual contractions; and if given in amount to relieve pain, inhibits the activity of uterine musculature and stops labor pains, with predisposition to uterine relaxation and post-partum hemorrhage; also in many patients it produces a decided degree of post anaesthetic nausea, vomiting and prostration. It should be resorted to in cases for complete relaxation as in version, or in toxemia cases. The Gwathmey technique but complicates the procedure, both by additional equipment and difficulties in administration. Ether still delays labor and inebriates the patient, so that quinine, also toxic to mother and child, in certain cases is added to promote labor, and morphine must be resorted to control the patient and relieve her pain.

Nitrous oxide, ethylene and cyclopane, requires elaborate equipment and a trained operator, making it expensive in the hospital, and next to impossible in the home. While it has little effect on contractility of the uterus, and may be given with pains, as chloroform is given; it predisposes to post-partum hemorrhage when insufficient oxygen is given. It must be avoided where relaxation for operative procedure is necessary, and post-partum relaxation of uterus is to be avoided. As for the infant, Eastman has pointed out that a concentration of nitrous oxide above 85-15 has a pronounced influence, through production of intra-uterine anoxemia; and a concentration of 90-10 for a period of five minutes or longer will produce severe asphyxia in three out of every five newborn infants.

Rectal anaesthesia, e.g. avertin, has been unsatisfactory because of inability to gauge dose to individual patient, with difficulty in management of the patient, and uterine relaxation and post partum hemorrhage.

Spinal and sacral block anaesthetic have not proved satisfactory. As [8]Montgomery, (Philadelphia) writes, the action of abdominal muscles is lost, although uterine contractions continue, labor is delayed, post-partum infections seem more prone to develop. Greenhill (Chicago) states that there is a definite mortality, toxic changes in spinal cord and nerve roots, headaches, fall in blood pressure, increased pulmonary complications, together with difficulties of giving it to a pregnant woman.

Local anesthesia is useful at times in pulmonary disease, or to relieve burden on the heart in poorly compensated heart disease both for episiotomy, vaginal delivery, or for abdominal section.

Hospital Cases		Home Cases
Mothers	100	198
Primipara	53 (1 Caesarean Section)	63
Multipara	47 (1 Caesarean Section)	135
Babies	102	200
Chloroform	80	156
Ether	16	0
No anaesthetic	4	42

A careful analysis of approximately 300 deliveries is given; while more analgesia is required, and given in the difficult cases, yet that alone does not account for the difficulties encountered,

the infant morbidity and mortality. In most cases it must be credited to the analgesia given.

SUMMARY

1. Obstetricians must not allow themselves to be too greatly influenced by lay propaganda, and the desire of the patient.

2. A careful study of the type and progress of labor is essential, together with the sustained confidence of the patient.

3. All forms of analgesia are dangerous to the infant, but when relief of pains is necessary, judicious use of morphine and scopolamin is recommended.

4. Chloroform anesthesia is safe, and best adapted to obstetric use.

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Toxemias of Pregnancy

The subject of the toxemias of pregnancy is such a vast one and there is so little definitely known about it that I hesitate to start talking about it when so little time can be given. However, with your indulgence I will go over some of the more important facts and findings briefly, for there still remains an appalling amount of toxemia in the country as a whole and the mortality is extremely high: 21.7 per cent and 20.0 per cent of all the deaths in the country and state respectively.

There has been little change in the conception of hyperemesis lately, except that there seems to be a growing tendency to consider all cases toxic in origin, with the symptoms greatly aggravated in some instances by the neurosis of the patient. Also when the vomiting has been present for a time there seems to have occurred considerable depletion of the glycogen reserve of the liver and the patient suffers from a definite hypoglycemia, which in turn makes the vomiting worse, so that intravenous glucose in fairly large quantities seems to be definitely indicated. The generally accepted practice is to give about 75 grams of glucose in the 24-hour period. Under the best possible treatment, interruption of pregnancy still seems necessary in the occasional case to save the patient's life, but it should not be resorted to until all other methods have failed, or the need seems urgent. And here a plea for the doctor to whom the case may be referred if hospitalization is deemed necessary. Frequently the transfer itself is a powerful psychic factor, and it is generally agreed that these cases are best handled in a hospital where complete isolation is possible and other methods of appeal may be carried out. Yet many a patient has had to have her pregnancy interrupted who could otherwise possibly have been treated successfully without this, simply because her physician had told her that he was sending her to the hospital for this procedure. So, when in your judgment, hospitalization is necessary, it is to be remembered that the patient should be told that she is being transferred for further treatment and not for a therapeutic abortion.—Louis H. Douglass, M.D., Baltimore, Md.; W. Va. Med. Jr., Vol. XXXIV, No. 6, June, 1938.

Hyperparathyroidism

Clinically, hyperparathyroidism manifests itself in the presence of (1) parathyroid adenoma, or (2) generalized hyperplasia of the parathyroid bodies. Although a hypertrophy and hyperplasia of the parathyroid bodies may be found in conditions such as osteomalacia, osteitis deformans, multiple myeloma, metastatic carcinoma, rickets, scleroderma and nephritis, the enlargement in these conditions is of a secondary or compensatory nature.

The main feature of hyperparathyroidism is a disturbance in the calcium and phosphorus metabolism, as evidenced by an increase in serum calcium, a decrease in serum phosphorus and an increased excretion of both of these elements in the urine. As a result of this excessive secretion of parathyroid hormone, characteristic changes take place, in most instances, in the bones. Inasmuch as the bones are the only storehouses of calcium and phosphorus in the body, this supply may become mobilized in a more or less rapid manner, according to the severity of the disease. In more or less early cases, upon X-ray examination there may be pronounced demineralization, whereas in the more advanced cases there are large irregular areas noted due to cystic formation (osteitis fibrosis cystica). In some instances there may be change in posture with rather marked kyphosis of the spine; bowing of the long bones and spontaneous fractures frequently occur.

Although the skeletal changes incident to hyperparathyroidism may be disabling, the real hazard of the disease is in the damage suffered by the kidneys, and it is noted that death, in most instances, is due to renal insufficiency or to complications of kidney stones. The patient usually shows rather marked loss of weight and loss of strength, and there is frequently a complaint of pain in the back, especially pronounced after exercising. There may also be generalized bony tenderness, especially in cystic areas—von Recklinghausen's disease.—William W. Washburn, M.D., San Francisco; Cal. and Western Med. Vol. 48, No. 4, April, 1938.

BOTULISM: REPORT OF TWO CASES

By H. M. CLODFELTER, M. D., Columbus, Ohio

IT is generally believed that the use of antitoxin in the treatment of botulism is of no avail after the onset of symptoms. In reporting two cases which were severely affected, whose prognosis seemed hopeless, and in which the use of serum is believed to have been of great importance in their complete recovery, it is hoped that others will try it. It may not be as hopeless as we have believed.

On a Wednesday noon (Dec. 1, 1937) four children, from two families, ate lunch together. Among the foods eaten were home canned beans and home canned tomatoes which had been warmed a little before eating. No other members of either family ate of these foods it was reported. The beans had been cooked for four and a half hours before canning but not pressure cooked. The tomatoes had not been cooked as long.

The next day at school, in the afternoon, a girl and boy of these four noted double vision, some drooping of the eyelids and no pain and no bowel movements. No other distress was noted. They were not taken to their family doctor until that night who could find nothing unusual about them. He gave them each a large dose of castor oil which had no effect during the night. At 5:00 A.M. the next morning, 41 hours after the ingestion of the suspected food the girl died. No autopsy was performed.

The same day, about 48 hours after the deadly meal the third child noted double vision. At 7:00 P.M., 55 hours after the food suspected had been ingested, these two children were admitted to my service at Mercy Hospital.

Case One. A boy aged 13. Admitted 55 hours after eating suspected food and 30 hours after the onset of symptoms. He was sleepy looking, eyelids drooping, stuporous, responding to questions slowly and he looked to be desperately ill. He could not swallow and stated that he saw things double. The deep reflexes were absent but no abnormal reflexes were noted. The pupils reacted poorly to light. Otherwise the physical examination was negative. He had had no bowel movements in spite of the castor oil.

The blood count showed a hemoglobin of 115 per cent (17.9 gr. per 100 c.c.), a red count of 5,150,000, 31,600 white cells and in counting 100 leukocytes nothing but polymorphonuclears were seen. The urine obtained later was negative. The prognosis seemed hopeless.

Seven thousand five hundred units of Botulinis Antitoxin A and a like amount of type B was all of the serum available that night. It was decided to give equal amounts to the two cases. After the skin sensitivity test was negative for 30 minutes the serum was given intravenously. The serum was given diluted with 100 c.c. of normal saline to which was added 0.5 c.c. of 1-1000 adrenalin, the administration requiring about 30 minutes for the total of 150 c.c. At about the completion of the administration of the serum the respirations became rapid and he became quite restless. No further disturbance was noted. The following day 1250 units of types A and B were given subcutaneously as a precautionary measure against further absorption from the gastrointestinal tract.

After 48 hours he could swallow, the double vision was no longer noted and he seemed well on the road to recovery. On the eighth day he did develop a mild serum sickness, requiring no treatment and he was discharged as well on the fifteenth day. He looked as if he had been seriously ill.

Case two: A girl, age 6, was admitted with case one with the same findings except that her symptoms were less than 12 hours in duration. She seemed more profoundly sick than the boy. Her leukocyte count was 17,000 with only five per cent lymphocytes.

She was treated with the same dosage and in the same manner as was the boy. She too had a similar reaction immediately following the administration of the serum.

Her history of diplopia was elicited but could not be considered as reliable as was the case with the boy but it was a full 11 days before she was able to swallow even water. The details of her fluid and feeding problem will not be discussed here even though I am certain that it was of great importance in her ultimate recovery. The technic of fluid and food balance on a person who cannot swallow is no small job. On the twelfth day she was able to swallow water and some food.

On the eighth day she too developed a serum sickness far more violent than the boy's. She was a huge urticarial wheal with marked rigidity of the neck and severe joint pains. Only a minimum of therapy was ordered. After two days the serum sickness subsided. After 18 days she was discharged from the hosiptal.

The fourth child in this series began to have symptoms after the two described above were admitted. We were unable to accept her on our service and she was admitted to Children's Hospital where available serum was used but she died promptly. The details of her treatment are not available at this time however a complete autopsy with chemical studies has been reported as entirely negative. I did not see either of the fatal cases.

Dr. O. C. Woolpert of the Department of

Submitted February 1, 1938.

The Author

● Dr. Clodfelter is a graduate of the University of Kansas, 1930; chief of medical service, Mercy Hospital, Columbus; director of Columbus Clinic.

Bacteriology of Ohio State University furnished the first dose of serum for each of the two cases which was made for experimental purposes by Jensen Salsbery Laboratories of Kansas City. The follow up dose was made for veterinary use by the Columbus Serum Company and was likewise furnished free of charge.

Dr. Woolport was also present at the time the serum was given and blood was drawn for study which did not show the presence of toxins. All of the available samples of related foods in the home were studied by Dr. Woolport and although one can was found which was bulging no botulism was found. Unfortunately none of the actual suspected food was available for study.

DISCUSSION

The typical clinical picture of botulism, with two deaths in four cases and the response to specific serum therapy in the two cases with recovery seems adequate for the diagnosis of botulism. None of the food eaten was available for study. The two that recovered were treated with all of the serum available at the time and both recovered completely. With such results in mind it seems advisable to be more considerate of antitoxin therapy, be more likely to use it in spite of the presence of symptoms until a large enough series may be studied to make reliable conclusions possible.

The two purposes of publishing this report are to try to stimulate the trial of antitoxin therapy in suspected cases of botulism as early as possible but even after the onset of symptoms and to call the reader's attention to the value of a carefully maintained fluid balance. Eleven days is a long time to go without swallowing food or water.

The leukocyte counts showing 95 per cent and 100 per cent polymorphonuclears is only presented as a matter of record and for further study.

SUMMARY

Four cases of botulism occurred in one outbreak. Two died but were not seen by the author. Two recovered after administration of antitoxin and the maintenance of proper fluid balance, food considerations and bed rest. The more severe of the two had a complete paralysis of the throat and swallowing for eleven days yet both cases recovered completely.

683 E. BROAD STREET.

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Uveal Tuberculosis

It is well known that primary tuberculosis rarely kills. It usually occurs early in life,—sooner in urban, later in rural dwellers. This primary infection, when it doesn't kill, induces a tissue response which assists the host in resisting further invasion by the offending organism. This response is called **immunity**.

With a second infection the host may, however, respond in a manner indicating that a hypersensitivity has been induced. The tissues seem to react in such a violent fashion that inflammatory and exudative phenomena occur which are more damaging than the response of the host to the primary infection. The individual is then said to be allergic. Allergy does not always follow primary tuberculous infection.

There are some who maintain that allergy and immunity are the same mechanism; but in allergy the response is so uncontrolled and violent that the effort meant to defend really inpuries.

Others maintain that these two states are separate mechanisms, and can be dissociated by immunologic means.

It is clear therefore that the character of the response of an individual to socondary tuberculosis infection depends on the quantitative relationship of three factors:

1. Number and virulence of invading organisms or their toxic products.
2. Degree of allergy.
3. Degree of immunity.

Great numbers of organisms with low immunity and low allergy result in miliary tuberculosis.

Small numbers of organisms with high immunity and little allergy, result in mild febrile reactions with few local lesions.

Moderate numbers of organisms with high allergy, result in highly exudative, even necrotizing lesions.—George P. Meyer, M.D., Camden, N. J.; Jr. Med. Soc. of N. J., Vol. XXXV, No. 3, Mar., 1938.

Industrial Tuberculosis

It is an accepted fact that tuberculosis being an infectious disease is capable of producing and actually does produce active tuberculosis in people regardless of their social and economic rank. It is also true that poverty goes hand in hand with tuberculosis and that most tuberculosis will be found in people of the under-privileged classes.

Of great public health interest is the fact that the servant, the cook and the waiter, representatives of the lower economic rank, have unusually high mortality rates. Since these people represent frequent sources of infection to the community, the control of tuberculosis in this economic group becomes a major public health problem.—H. I. Spector, M.D., St. Louis, Mo.; Jr. of Mo. St. Med. Assn., Vol. 35, No. 4; April, 1938.

CLINICAL RESULTS IN THE PREVENTION AND TREATMENT OF HAY-FEVER BY ORAL ADMINISTRATION OF POLLENS OF THE GRASS AND RAGWEED TYPES

By GEORGE E. ROCKWELL, M.A., M.D., CINCINNATI, OHIO

PRIOR to the establishment of immunization therapy for hay-fever by Noon in 1911, Curtis[1] (1900) reported on the oral administration of an extract of the ragweed plant, and Scheppegrell[2] (1909) attempted to actively immunize by having the patient snuff the dried pollen. Because there are many advantages attached to the oral administration of pollen extracts, a number of workers have tried this method for the treatment of hay-fever. Thus we find Touart[3] (1922) reporting a small series of cases with doubtful clinical results. This was followed by more extensive studies by Black[4] (1927), Walzer[5] (1931), Thommen[6] (1931), Urback[7] (1931-37), and Gatterdam[8] (1933), all of whom had somewhat better results than those reported by Touart.

The oral administration of pollen extract has brought up the question of whether any of the active substance of pollen is absorbed from the intestinal tract and also if the digestive juices destroy the pollen antigen. Bernstein and Kirsner[9] (1937) reported experiments which they believe showed that little or none of the pollen extract administered orally is absorbed. However, they were working with normal individuals, and is it not possible that a normal person would not absorb the pollen from the respiratory and also the intestinal tract as readily as a hay-fever patient? This view is partially substantiated by the work of Black[4] (1927) who had previously shown that he could find an appreciable amount of the active substance of the pollen in the blood serum and urine of a hay-fever patient who had taken pollen extract orally.

Grove and Coca[10], Black[11], Black and Moore[12], Kammann[13], Melli[14], Bernstein and Kirsner[9], believe that the active principle of pollen is not destroyed by peptic or tryptic digestion, while Loeb[15], Caulfeild, Cohen and Eddie[16], and Moore and Unger[17], claim that it is destroyed.

More recently Barksdale[18] (1936), McGrew[19] (1937) and Stier and Hollister[20] (1937), have reported favorable clinical results following the oral administration of pollen extracts. Unfortunately, but very few of the cases reported to date are of the severer type of hay-fever, namely, ragweed type; except the most recent report by Bernstein and Feinberg[21], who observed no beneficial results following the oral administration of pollen in a series of ragweed hay-fever cases.

Each year for a number of years we have treated a few cases of hay-fever by oral administration of pollen or its extracts, but during the season 1935, we treated fifteen cases, in 1936, forty-eight cases, and in 1937, one hundred and nineteen cases. We are reporting these groups at this time.

Submitted March 30, 1938.

The Author

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PREPARATION OF POLLENS

The cases treated during the season 1935 were all Fall hay-fever cases, that is, the patients were all sensitive to ragweed pollen. A 6 per cent extract of equal parts of large and small ragweed pollen was made in an alcoholic saline extracting fluid. The 48 hour extract was filtered through filter paper and Berkfeld filtered for sterility. Control cultures were made. This extract was mixed with ordinary edible starch, and dried in a tray beneath the freezing coils of an electric ice box. This dried pollen absorbed on starch was then filled into capsules. The proportion of pollen to starch was so adjusted that capsules of various definite dosages resulted. The dosage per capsule, in the sequence in which they were administered was as follows: 50; 100; 200; 500; 1000; 2000; 3000; 5000; 7500; 10,000; 12,500; 15,000; 17,500; 20,000; 25,000; and 30,000 pollen units per capsule. Several of the severe cases were carried to 60,000 or 90,000 units.

The pollen capsules were prepared differently for the season of 1936, during which whole pollen was used. Because the pollen is heavily contaminated with molds, and possibly with actinomyces and pathogenic spores, it must first be sterilized. This was done in two ways:

In the first method formaldehyde was used. Numerous tests have shown that formaldehyde does not destroy the pollen antigen, and consequently we have made use of its powerful germicidal action in the following manner. A 1 per cent formaldehyde solution was used, enough

being taken to wet the pollen. This required about 5 cc. to each gram. After mixing thoroughly, the pollen was allowed to stand six hours, as previous experiments had shown that the pollen was always sterile in this time. Control cultures were, however, made on each batch and were always negative. The formalyehyde was then destroyed by adding a slight excess over the calculated amount of ammonium hydroxide, which changed the formaldehyde to urotropin (hexamethylene tetramine) and water, according to the following reactions:

$$6HCHO + 4NH_4OH = (CH_2)_6N_4 + 10H_2O$$

The urotropin, in the quantities which were present, is a harmless drug, and slightly antiseptic. Any excess ammonia was not detrimental, as it was given off in the drying step which followed. After neutralization of the formaldehyde, the mixture was ground to comminute the pollen. We found that 12 to 18 hours grinding in a ball mill produced the right amount of comminution. After the grinding operation, starch was added in the desired amount and thoroughly mixed with the comminuted pollen by milling it another two hours. It was occasionally necessary to facilitate this mixing by adding pure grain alcohol.

After the mixing process, the pollen starch mixture was put in trays and dried under the coils in the electric ice box, or under vacuum at approximately 40°C. We have found that alcohol considerably diminishes the deleterious effect of heat.

The second method used was sterilization with four parts of 95 per cent alcohol and one part of 1 to 1000 merthiolate solution (Sodium Ethyl Mercuri Thiosalicylate, Lilly). After sterilization, the pollen was milled in a ball mill for 12 to 18 hours. Subsequent examination showed that the pollen granules were finely broken up. This was done to facilitate even mixture with the starch, and to increase the rate of solubility of the pollen antigen. One such test showed that when 3 grams of pollen were extracted in 100 cc. of extracting fluid for fifteen minutes, 0.350 mgm. nitrogen was extracted from the milled pollen while only 0.250 mgm. was dissolved from the unmilled control. The sterile milled pollen antigen was then dried as described above, mixed with starch, and milled two hours for mixture.

The dried pollen starch mixture was put into capsules so that the following doses were obtained: 500; 1000; 5000; 10,000; 15,000; 30,000; and 45,000 pollen units per capsule. Some of the cases were carried to 90,000 units.

Forty-eight cases were treated during the season 1936. The Fall type hay-fever cases were

TABLE I

Showing the Results When Pollen Was Given Orally For the Prevention and Treatment of Hay Fever.

Type of Pollen and When Given	No. Patients	**Complete Relief	Satisfactory Relief	Fair Relief	No Relief	*No Reactions	Per cent who had satisfactory relief or better	Per cent who had no relief
Ragweed Pre-seasonal 1935	15	4	6	0	5	0	66.6	33.3
Ragweed Pre-seasonal 1936	42	10	13	0	19	13	54.8	45.2
Mixed Grasses Pre-seasonal 1936	6	5	1	0	0	0	100.	0
Mixed Grasses Pre-seasonal 1937	29	8	11	6	4	2	65.5	13.8
Ragweed Pre-seasonal 1937	78	14	34	15	15	10	61.5	19.2
Ragweed Co-seasonal 1937	12	5	4	2	1	1	75.	8.3

* Only two cases developed hives, the rest had an indefinite feeling of malaise during the morning following the taking of the oral pollen.

**Complete relief means no trouble at all.

Satisfactory means occasionally some trouble, but on the whole were very comfortable.

Fair relief means improvement, but not as much as one would desire.

given a mixture of equal parts of large and small ragweed pollen, while for the Spring and Summer hay-fever, equal parts of June grass, red top, timothy, sweet vernal grass and orchard grass pollen were used.

The capsules were prepared in a slightly different manner for the season of 1937. The pollen was treated with alcohol and merthiolate (Sodium Ethyl Mercuri Thiosalicylate, Lilly) until sterile, then dried under vacuum at approximately 40°C. The sterile dried pollen was then milled until the proper amount of comminution was obtained and then mixed with starch and filled into capsules. The dosages in the sequence in which they were administered was as follows: 500; 1000; 1500; 2000; 4000; 6000; 10,000; 20,000; 30,000; 60,000; 90,000; 120,000; and in a few cases on up to 240,000 pollen units in the case of the ragweed; while in the spring type the dosages were carried only to 60,000 pollen units. The pollen used was the same combination as used the previous season.

EXPERIMENTAL

The pollen was administered both pre-seasonally and co-seasonally. In the case of the pre-seasonal administration, the treatment was continued through the pollen season. Depending on the time of starting, the doses were taken once or twice weekly, until the pollen season began, and then several times weekly, or often enough to control symptoms. In the case of the co-seasonal treatment three doses were given daily, until symptoms were controlled, and then several times weekly or as often as was necessary to control symptoms. The capsules were given with cold water on an empty stomach.

In the season of 1935, 15 cases, in 1936, 48 cases and in 1937, 119 cases of hay-fever were treated with oral pollen. This does not include four patients who started the treatment but discontinued it after taking from one to six doses. All four of these cases started and discontinued the treatment before the season began.

The results for each year are shown in Table I, and the total results for the three years are shown in Table II.

The cases were diagnosed by a careful history and in most of the cases this was further checked by skin tests. The data were collected by observation and examination of the patient, and by frequent reports by each patient as to his condition.

From Tables I and II, it is seen that of the total of 182 cases treated, 115 or 63.2 per cent received satisfactory to complete relief, while only 44 cases or 24.1 per cent had no relief. It will also be noted that the ragweed cases did not fare as well as the grass cases. Although the cases treated co-seasonally are small in number, it is of particular interest that they responded the best, 75 per cent receiving satisfactory to complete relief and only 8.3 per cent having no relief.

In the treatment of hay fever there are several factors which must receive consideration, one of which is collateral sensitizations. Approximately one half of the cases reported here were tested for other sensitizations and these were eliminated during hay-fever season. Another factor is the size of the maximum dose, and the frequency which it is taken. All of the patients contacted at the beginning of the hay-fever season who were experiencing symptoms, were treated by one of two procedures. Either the size of the maximum dose was increased, or the patient was instructed to take the present dose more frequently, that is once or twice daily until symptoms were relieved and then as often as necessary to keep free of symptoms. Most of the patients on following these instructions were free of symptoms in two to four days.

TABLE II

Showing a Summary of All the Hay Fever Cases Treated With Oral Pollen for the Seasons of 1935, 1936 and 1937.

Type of Pollen and when given	No. Cases	No. Having Satisfactory or better results	No. Having Fair Results	No. Having No Relief	Per cent Satisfactory or Better Results	Per cent No Relief
Ragweed Pre-seasonal	135	81	15	39	60.	28.8
Ragweed Co-seasonal	12	9	2	1	75.	8.3
Mixed Grasses Pre-seasonal	35	25	6	4	71.4	11.4
Total	182	115	23	44	63.2	24.1

Reactions encountered were never the severe systemic ones which occur with the injection of pollen extracts. Among the entire group there were only two individuals who developed hives. The rest of the reactions consisted of an indefinite feeling of malaise. Approximately 10 per cent of the patients reported that they thought they had such mild reactions. However, many were not absolutely sure that it had any connection with the taking of the pollen capsules. In the patients complaining of such reactions, it was found that this effect could be avoided by changing the time of taking the capsule to after a meal, instead of on an empty stomach.

We have used the dry pollen or its extract dried, because it offers several advantages, namely, it is more convenient to take, the patient does not have to count out drops, it keeps indefinitely, and it can be carried in the pocket or bag, without danger of spilling.

DISCUSSION

In the hypodermic administration of pollen extracts it is generally recognized that the grass pollen hay-fever cases are completely relieved by a much smaller maximum dose of pollen extract than are the ragweed cases. It is also common experience that co-seasonal treatment requires much smaller doses than does pre-seasonal or perennial treatment. Thus it is not surprising that in the oral administration of pollen the grass pollen cases and co-seasonal treated cases have responded the best. Careful analysis of our cases, especially individual cases, has lead us to the conclusion that oral pollen dosage must be from 50 to 100 times greater than when hypodermic administration is used. However, it also seems that this maximum dose need not be given as one dose, but can be broken up into several doses providing that all of the doses are given in the same day.

All hay-fever treatment whether it be perennial, pre-seasonal, or co-seasonal resolves itself into seasonal treatment. By this is meant that it is absolutely necessary in all the methods to give frequent doses of the pollen extract during the hay-fever season. In oral therapy, it appears that the benefical effect of a dose does not last as long as a hypodermic dose. Hence, in oral therapy, more frequent dosage is required during hay-fever season. This is probably another expression of the fact that the size of the oral doses used to date is too small.

SUMMARY

The clinical results, for the seasons 1935, 1936, and 1937, are reported in the prevention and treatment of hay-fever by oral administration of pollen of the grass and ragweed types. A total of 182 cases were treated with 115 cases of 63.2 per cent having satisfactory to complete relief, and 44 cases or 24.1 per cent receiving no benefit. The ragweed cases receiving pre-seasonal treatment had satisfactory to complete relief in 60 per cent of the cases, the ragweed cases receiving co-seasonal treatment had 75 per cent complete to satisfactory results, and the grass cases, all of which received pre-seasonal treatment, had 71.4 per cent of the cases having satisfactory to complete relief with only 11.4 per cent receiving no relief.

Although our results are not perfect, they are encouraging. It is our belief that if the build-up doses are completed by the beginning of the hay-fever season, and if the maximum dose is sufficiently large and administered often enough, most of the patients can be kept free of symptoms. Under these conditions results will be obtained comparable to the injection method, and superior with respect to convenience, absence of severe systemic reactions, and lower cost of treatment. Certainly, at the present development it offers a method of treatment for those patients who refuse to take hypodermic injections, or who have not the time to go to the doctor's office for each treatment, and those who, due to traveling, are unable to obtain the injections.

2500 MELROSE AVENUE.

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POLIOMYELITIS: SYMPTOMATOLOGY AND TREATMENT

PART I

By FRANK E. STEVENSON, M.D., CINCINNATI, OHIO

THE presence of infantile paralysis in a community strikes a note of apprehension in the mind of the parent, layman and physician alike. Knowledge of a low morbidity rate for the disease does not completely offset either the relatively high case fatality rate and the incidence of residual paralysis among those who survive, or the unpredictable manner in which the virus of poliomyelitis seeks out its victims. The laity and the medical profession are both deeply interested in the early diagnosis of poliomyelitis as well as in its treatment, both preventive and therapeutic. The symptomatology and treatment are so intimately related to the injury dealt the nervous system during the course of invasion and spread of the virus, that a preliminary but brief review of the route of invasion and of the pathology of the disease is indicated.

Route of Invasion.—Poliomyelitis can be produced in experimental animals by intracerebral injection of the virus, by introducing the virus intrathecally or intravenously, and by subcutaneous and intracutaneous inoculation. Infection can also take place through injured medullated nerves through contact with exposed fibers. The nonmedullated olfactory nerve, however, seems to afford an open highway to the virus instilled in the nose. Infection fails to follow nasal instillation if the olfactory nerves are first severed or if the olfactory nasal mucosa is subjected to a preliminary spraying with a zinc sulphate solution. Much less readily, the intestinal tract also provides a route of invasion. Certain of these experimental routes of invasion can play no part in the infection with the poliomyelitis virus in man. The subcutaneous and intracutaneous route under natural conditions must remain very questionable unless it can be demonstrated that the disease is transmitted by sucking and biting insects. Largely due to its accessibility to invasion and to the relative ease with which the experimental disease follows nasal inoculation, the olfactory nerve at the present time is generally considered to be the probable portal of entry. It must be borne in mind, however, that the route of invasion in man is not definitely known.

The Olfactory Route.—The virus, after first invading the olfactory mucosa to reach the olfactory cells, passes along the axons of the nerves to become implanted in the olfactory bulb[2, 3]. Making its way along the olfactory tract, the virus reaches the interbrain (hypothalamus and thalamus) where the first or early general symptoms of illness are produced (Clinical Phase 1, see Fig. 1). The infecting agent may pass from the hypothalamus to the medulla by a subsidiary route; much more frequently it descends through the spinothalamic tract to the posterior horns and the intervertebral ganglia of the cord where it produces the late preparalytic symptoms (Clinical Phase II, see Fig. II). The infecting agent then passes forward through connector fibers to reach the anterior horns and columns of Clarke, to give rise to symptoms and signs of lower motor involvement (Clinical Phase III, see Fig. IV).

Pathology.—Invasion by the virus results in varying degrees of injury to the nerve cells, perivascular infiltration with lymphocytes, oedema, congestion, and petechial hemorrhages. The earliest changes take place within the cord. The perivascular infiltration then moves outward along the blood vessels to involve the meninges. Evidence of meningeal irritation is then a relatively late rather than early manifestation of cord involvement. Presumably, by the time signs and symptoms of meningitis have developed, some degree of injury has already been inflicted upon the nerve cells. Whether or not muscular weakness or definite paralysis occurs or whether the resulting paralysis is temporary or permanent, will depend upon the degree of injury inflicted upon the nerve cells. Nerve cells destroyed cannot be replaced. Whether or not the residual paralysis is complete will depend upon the number of motor cells that survive the attack. While the anterior horn cells of the spinal cord bear the brunt of the involvement, the white marrow, the posterior horn cells and the spinal ganglia are also involved, the latter presumably giving rise to much of the sensory disturbance seen in poliomyelitis.

Incubation Period.—Statistics regarding the

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Submitted at request of the Editor, June 1, 1938. This complete survey of symptomatology and treatment of poliomyelitis has been broken into two parts: the second part will appear in the August Issue and to it will be appended the bibliography.

duration of the incubation period are not easily obtained since the source of the infection in the individual patient is so often unknown. Generally, the incubation period is thought to range from one to two weeks with an outside limit of five to twenty-one days.

The Preparalytic Period.—(The period of invasion; the prodromal period).—Poliomyelitis was originally thought to be characterized first by systemic invasion and then by localization of the virus in the central nervous system and it still remains customary to divide the symptoms of this stage into the early general manifestations and the late central nervous system symptoms. Whether the early symptoms are due to systemic invasion or whether, as is now generally believed, they merely represent a systemic reaction to some localized infectious process in the central nervous system, is not definitely known.

FIGURE I

CLINICAL PHASE I. Cerebral, or diencephalic stage

Route of Infection	Anatomical Source of Symptoms	Characteristic Symptoms
Olfactory bulb to hypothalamus and thalamus; (midbrain, medulla).	Hypothalamus, thalamus, medulla (?)	Fever; drowsiness alternating with restlessness and sleeplessness; vegetative disturbances (sweating, etc.); general hyperesthesia; affective disturbances (apprehension, fear, anxiety, awareness of trouble, heightened affective sensibility, especially to pain); vomiting; headache.

H. K. Faber[3].

A. General Systemic Symptoms.—Nothing characteristic is usually found in the early general symptoms.

Fever is the most frequent manifestation of illness. Closely associated with fever are general malaise and irritability, and headache in the older group of patients. Occurring separately or in combination, and varying in severity and in frequency of occurrence, respiratory and gastro-enteric symptoms may be present. The respiratory symptoms are usually mild and arise mainly from involvement of the nasopharynx. The presence of such symptoms, it is thought, merely bears out the theory that the nose is the portal of entry of the poliomyelitis virus. On the other hand, other authors contend that the occurrence of vomiting, diarrhea and abdominal pain and, rarely, of symptoms simulating those arising from appendicitis is an indication that the primary site of invasion is in the digestive tract.

B. **The Central Nervous System Phase.**—The neurogenic symptoms and signs of the preparalytic stage are sensory, motor and vasomotor in origin. Intermingled are the general symptoms and those which are due to involvement, either direct or indirect, of other systems.

FIGURE II

CLINICAL PHASE II. Stage of posterior poliomyelitis: lower sensory stage

Route of Infection	Anatomical Source of Symptoms	Characteristic Symptoms
Thalamus; through spinothalamic tract to posterior horns of cord; to posterior root ganglia.	Posterior horns; posterior root ganglia.	Localized pains and tenderness; disturbance of pain and temperature sensibility; pain on flexion of spine; pain to Kernig maneuver; increased tendon reflexes.

H. K. Faber[3].

Symptomatology.—Fever.—Fever, as in the systemic stage, is the most nearly constant of all symptoms.

Cardio-Respiratory System—In the great majority of patients, a very mild form of pharyngitis will be found upon examination. Strangely enough, the nasal mucosa usually reveals less involvement than that of the pharynx. The associated symptoms, however, are usually of such slight degree that they are often denied by the patient and over-looked by the parents.

From time to time the symptoms and signs of an upper respiratory infection are quite intense. Occasionally there is an associated involvement of the cervical nodes, particularly those of the posterior chain.

Gastro-enteric System. — As in most infectious diseases, anorexia is usually present. Nausea and vomiting occur frequently during the preparalytic stage. Now and then, the complaint of abdominal pain and tenderness is obtained, although symptoms of this type are sometimes confused with nausea by the young child. Diarrhea or constipation may occur. In a group of patients recently observed, an unquestionable history of diarrhea during the late preparalytic stage could not be obtained in a single instance.

Genito-urinary System.—As in menigococcus meningitis and in certain other forms of meningeal involvement, acute but usually temporary retention of urine is of occasional occurrence.

Skin (Cutaneous System).—The skin of the poliomyelitis patient is usually moist, no doubt due in part to the season of the year in which the disease occurs. Quite independent of fever and of atmospheric conditions, profuse sweating sometimes occurs, either generalized or localized particularly about the head. In rare instances, the hyperhidrosis is unilateral in distribution.

Central Nervous System.—Many patients with polomyelitis are irritable, alert and somewhat restless, apparently stimulated by the infection. More frequently, however, the patient is dull and listless and objects to being disturbed. Occasionally, a semi-stuporous state is observed. Among those patients old enough to complain, headache is one of the most common symptoms. The headache may be mild or severe, generalized or localized, intermittent or constant. Convulsions occur so rarely in poliomyelitis that their presence in a suspected case of the disease tends to make the diagnosis questionable.

Hyperesthesia, tenderness and pain.—Few symptoms of poliomyelitis are subject to as great a variation in intensity as are those of hyperesthesia, tenderness and pain. In the majority of patients some discomfort can be elicited about the spine. From personal studies, tenderness is often found to be present upon pressure over the spinous processes, particularly in the cervical region where point tenderness is often observed over the spine of the second cervical vertebra. Localization of these symptoms to one or more extremity is thought sometimes to foretell the site of impending paralysis. Manifestations of hyperesthesia, tenderness, and pain may be elicited by stroking, by pinching the skin, by deep pressure, and by manipulation.

Tremors.—Tremors and twitchings usually appear late in the preparalytic stage and often herald the approach of paralysis.

Signs of Meningeal Irritation.—Pain and muscle rigidity about the spine are due in large part to the involvement of the meninges. The signs and symptoms which offer the greatest aid to early diagnosis of poliomyelitis are based on these manifestations. Manifestations of meningeal irritation merely suggest that the meningitis may be caused by the virus of poliomyelitis. The diagnosis must then rest upon the history and clinical findings of the patient, upon the spinal fluid studies, as well as upon the subsequent course of the illness. Now and then, a definite diagnosis cannot be made. In analyzing the signs of meningitis it should be borne in mind that they are generally less marked in intensity than in the average case of pyogenic meningitis; again, that the intensity of the meningeal manifestations varies within extremely wide limits from patient to patient.

Gun-Hammer Position.—Under excessive stimulation from meningeal irritation, posterior retraction of the spine occurs as a result of contraction of the stronger, posterior muscles with stretching of those of the anterior group. Under such conditions the patient may assume the gun-hammer position, lying on the side with the head and neck retracted dorsally and with the thighs and lower legs flexed. Since the gun-hammer position is usually a manifestation of marked meningeal irritation, it is not commonly observed in poliomyelitis. Much more frequent is the presence of varying degrees of muscle spasticity which interferes with the normal movements of the spine.

Stiff or poker spine.—Stiffness of the spine is sometimes elicited by placing the patient in a standing position with the request that an object be picked from the floor. Since less physicial exertion is required, it is much preferred that attempts to elicit stiffness be performed with the patient in bed. This can be done by observing the movements of the spine as the child attempts to rise from a prone to a sitting position, or by noting his ability to approach normal anterior flexion of the spine when supported in a sitting position with legs outstretched. A spine with definite limitation of movement is spoken of as a "stiff" or "poker spine."

Tripod or Amoss' Sign.—Because of limitation to normal anterior flexion of the trunk, the patient with a poker spine is usually unable to maintain a sitting position without support when the legs are outstretched on a flat surface. If asked to sit by supporting himself the patient usually braces the body by carrying the arms posteriorly, placing his hands on the bed in the tripod position. Quite often while an attempt is being made to elicit the presence of the poker spine or the tripod sign, the patient is observed to flex the knees, a reaction at one time known as the positive Kernig's sign.

Kernig's Sign.—Instead of flexing the body upon the lower extremity, Kernig's sign is now elicited by flexing the thigh upon the trunk, after

which an attempt is made to extend the leg completely upon the flexed thigh. In carrying out the test it is essential that the thigh be maintained in a position at right angles to the trunk. Apparently positive reactions which are mild in character obviously must be interpreted in the light of the patient's age; often that which is interpreted as a normal or negative response in the adult becomes a positive Kernig's sign when elicited in the young child. Reports recorded in the literature, while revealing marked variations in the frequency with which a positive Kernig's response occurs, seem to indicate that the sign is unreliable in poliomyelitis. Personal studies made in the late preparalytic and early paralytic stage of the disease rank Kernig's sign with the rigidity of the neck and Brudzinski's neck sign as one of the most useful manifestations of meningeal irritation in poliomyelitis. Bikeles' sign, the Kernig's sign of the upper extremity, is quite unreliable.

Rigidity of the neck.—Due in a large part to the ease with which it can be demonstrated in this area, rigidity of the spine is most frequently observed in the cervical region. In fact, rigidity of the neck is the most nearly constant sign of meningeal irritation in poliomyelitis. The degree of muscle rigidity varies greatly from patient to patient. Unless the head and neck are carried well forward and downward over the upper sternum, a mild degree of rigidity may be overlooked. The frequency with which rigidity can be demonstrated upon lateral flexion closely follows that of anterior flexion. Now and then, rigidity is to be observed upon lateral rotation of the neck in a horizontal plane. Only occasionally is Binda's sign associated with rigidity upon rotation of the neck.

Brudzinski's Neck Sign.—Rigidity of the neck as well as a general stiffness of the spine is the basis of Brudzinski's neck sign. The sign is closely related to that of Kernig's, particularly as originally demonstrated. The sign is elicited by anterior flexion of the neck and head, while the patient lies flat on the back with legs completely extended. Flexion of the knees after carrying the neck and head forward is considered a positive reaction.

As with all signs of meningeal irritation, the intensity of the Brudzinski response will be found to vary within wide limits from patient to patient. Mild reactions are often overlooked unless both the neck and head are acutely flexed, bringing the chin well down over the upper sternum. In carrying out the test it is usually necessary that one hand be held firmly but gently against the upper sternum. When properly performed in the presence of meningeal irritation, some evidence of discomfort is usually observed when the neck is flexed. On the other hand, a falsely positive reaction may be obtained when the test is attempted upon a struggling and resisting patient, particularly young infants. Brudzinski's neck sign, when properly performed, is one of the three most valuable aids to the diagnosis of meningeal irritation in poliomyelitis.

The Head Drop Sign.—Upon elevation of the shoulders from the bed, the head may be observed to fall backward against the mattress, producing the head drop sign. Furthermore, the patient is then usually unable properly to raise the head from the bed. The sign is not of frequent occurrence in the disease and is not pathognomonic of poliomyelitis.

The Tache Cerebrale.—The tache cerebrale can often be elicited in poliomyelitis by drawing a blunt object such as the rounded end of a tongue depressor, or the back of the finger nail, firmly over a cutaneous surface. A positive reaction is characterized by the gradual appearance and then disappearance of a broad red band at the site of irritation. Without the presence of other manifestations, the mild reaction is of little diagnostic value.

Reflexes.—(A). Superficial reflexes.—The abdominal reflexes may appear hyperactive. The statement sometimes made that the abdominal reflexes usually disappear during the preparalytic stage is not entirely correct. Much more frequently these reflexes either remain unchanged throughout the entire course of the illness, or become hypoactive, unequal or absent after the appearance of paralysis elsewhere in the body. At the present time, loss of the abdominal reflexes is thought to indicate some weakness or paralysis of the underlying muscles. Babinski's sign and ankle clonus are usually not observed in the spinal form of the disease.

(B) **Deep reflexes.**—As a general rule, the deep reflexes are hyperactive during the preparalytic stage. Inequality or loss of deep reflexes marks the beginning of paralysis and the end of the preparalytic stage.

Type of Onset.—Based upon the character and course of the symptoms and signs, four types of onset are recognized in poliomyelitis.

A. **The Dromedary Type.**—Years ago Draper applied the term "dromedary" to those patients in whom a period of well being occurred between the early general symptoms and those of the late nervous system phase. Although incorrectly named, this type received its title from the two humps visualized in Figure 3. The curve in Figure 3 does not represent merely fever alone, but is a compositive curve of all symptoms and signs.

DROMEDARY TYPE OF ONSET

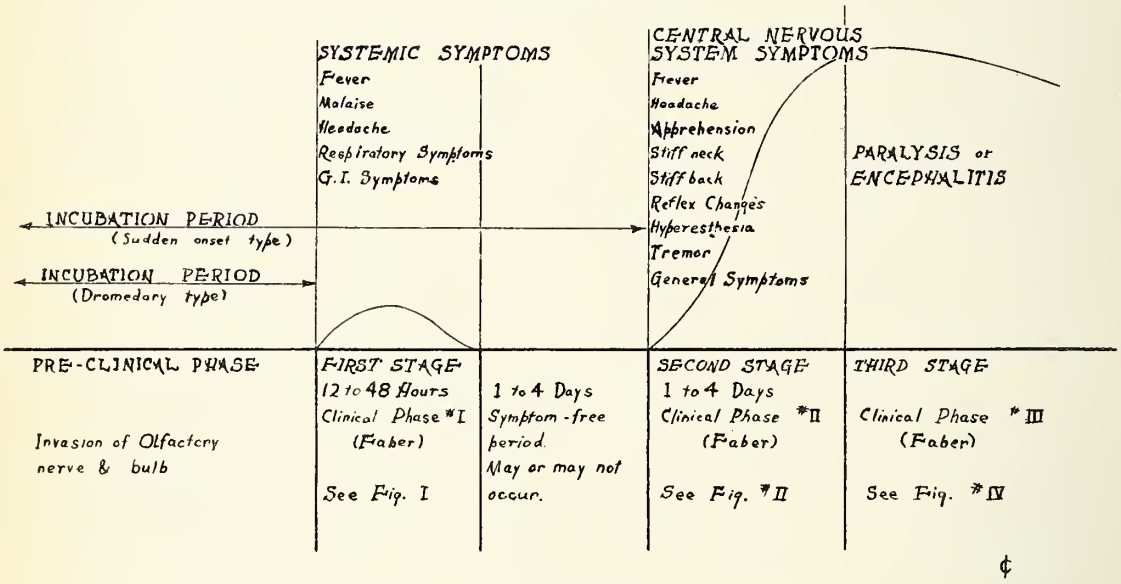
At one time it was thought that the first hump represented a general systemic invasion by the virus; the second curve, that of localization in

the nervous system. Evidence at the present time seems to show that even the early symptoms of the first hump are due largely or even entirely to involvement of the nervous system (See Figure 3). The intervening period of well being observed in the dromedary type of onset is thought merely to reflect the tendency of the virus to be held up from time to time in its spread through the nervous system. Presumably this same phenomenon is sometimes seen during the paralytic stage, in the progressive form of the disease.

While not the usual type of onset, it is difficult to determine the exact frequency with which the disease are largely theoretical. Presumably, subclinical infections of this type are largely responsible for the fact that the blood serum of the great majority of adults living in congested areas contain antiviral substances for the infecting agent of poliomyelitis. Presumably, too, these subclinical forms of infection play the greater part in the transmission of the disease and account for the fact that the source of the infection of a typical clinical case of the disease is seldom known.

The Paralytic Stage.—(The stage of advance; the fastigium)—Usually sudden in onset, the maximum extent of the paralysis ordinarily is

FIGURE III



DROMEDARY TYPE OF ONSET

dromedary type occurs. Due to the short duration and mild character of the early symptoms and the duration of the intervening period of well being, it has been pointed out that the early signs of illness may be readily overlooked or forgotten.

B. The Straggling Type.—In the straggling form of onset, the intervening period of well being does not occur, the nervous system manifestations following immediately upon the early general systemic symptoms.

C. The Sudden Onset Type.—In the sudden onset type, the first hump of general symptoms is absent. The patient suddenly becomes ill with manifestations of central nervous system involvement.

D. The Abortive Type.—The abortive form of onset differs from the dromedary type in that the virus is permanently and not temporarily checked in its spread; the second hump then fails to appear. Opinions in regard to the abortive type of reached within a short time. The sudden character of the onset is often more apparent than real for a progressive increase in weakness of involved muscles may sometimes continue for twenty-four to forty-eight hours before evidence of paralysis is suddenly discovered by the parents. In the typical case of poliomyelitis, the distribution of the paralysis is usually determined within a short period of time. If the fever subsides and normal temperature is maintained, there will usually be no extension of the paralysis; in the presence of fever there is always great danger of an increase in the distribution of muscle involvement. The degree of involvement of any muscle or muscle group, on the other hand, often becomes progressively greater over a period of hours and sometimes even days after the temperature has returned to normal.

Detection of Paralysis.—In making the examination, the possibility of pseudo-paralysis due

to painful local lesions must be kept in mind. Inspection may be helpful in the discovery of frank paralysis if the effect of gravity is considered. Complete lack of muscle restraint or tone can also be detected on inspection when an extensively involved extremity is permitted to fall on a soft bed or pillows. Inequality or absence of deep reflexes affords confirmatory evidence of weakness or paralysis. Helpful, too, is the evidence of loss in muscle tone or drag, detected by the examiner when the extremity or part is carried passively back and forth through its normal arc. Our greatest aid to diagnosis lies in muscle testing, which is carried out by active resistance of the examiner to active movement on the part of the patient. In non-cooperative patients, slight stimulation with a sharp object is sometimes necessary. During the acute stage of the illness, interest should be directed only to detecting impairment in function of muscle groups rather than of individual muscles. During poliomyelitis epidemics, skill in muscle testing should be developed through practice carried out during routine examinations.

Symptoms and Signs.—With the appearance of the paralysis, the temperature usually returns to normal. With these two exceptions, the symptoms and signs of the paralytic stage resemble those of the preceding period. Symptomatic recovery is a gradual process usually requiring from fourteen to twenty-eight days and occasionally from one to six weeks. Late in the period, character changes are sometimes observed. Euphoria may be noted. Emotional instability is not uncommon, the child laughing or crying with little provocation. The signs of meningitis also persist into the paralytic stage, gradually disappearing sometime during the second or third week.

(Continued in August Issue)

FIGURE IV

CLINICAL PHASE III. Stage of anterior poliomyeltis: lower motor stage

Route of Infection	Anatomical Source of Symptoms	Characteristic Symptoms
Posterior horns and posterior root ganglia; through connector fibers to anterior horns, and columns of Clarke.	Anterior horns; cells of columns of Clarke.	A. Twitching; tremor; ataxia; weakness; diminution of reflexes. B. Flaccid paralysis; loss of reflexes.

H. K. Faber[3].

FIGURE V

CEREBROSPINAL FLUID IN POLIOMYELITIS

	Admission	Fourteenth Day	Twenty-first Day
Cells	125.86 per cm.	31.3+ per cm.	10.5+ per cm.
Protein*	64.2+ mg. %	136.6+ mg. %	91.8+ mg. %
Chlorides (NaCl)	729.9+ mg. %	675.4+ mg. %	706 + mg. %
Sugar	59.08+ mg. %	53.1+ mg. %	52.7 mg. %

*The protein determinations were made according to the method of Denis-Ayer. The normal protein content of the spinal fluid ranges between 16 and 38 mg. %.

FIGURE VI

THE CONVALESCENT PERIOD

CLINICAL PHASE IV. STAGE OF RECOVERY

Route of Infection	Anatomical Source of Symptoms	Characteristic Symptoms
No further spread; Infection dies out.	Undestroyed cells gradually recover; inflammation subsides.	Diminution of extent of paralysis; disappearance of pain and tenderness.

H. K. Feber[3].

ANTERIOR POLIOMYELITIS: ORTHOPAEDIC MANAGEMENT

By JOSEPH A. FREIBERG, M.D., F.A.C.S., Cincinnati, Ohio

IN the following discussion of anterior poliomyelitis, or infantile paralysis, the diagnosis and medicinal management of this disease will be excluded as there appears concurrently in this *Journal* an article covering this aspect of the therapy of this disease.

The part played by the orthopaedic surgeon in the treatment of these cases may be divided into the three phases of the disease—the acute, the convalescent, and the period of permanent residual paralysis. As the management of the cases in the three phases of the disease is essentially different, these will be discussed separately.

THE ACUTE STAGE

Rather arbitrarily the acute phase is considered to be that variable period of time from one week to six weeks in duration when the patient has the signs and symptoms of a systemic infection coupled with a variable degree of muscle and joint pains, and actual muscle tenderness to palpation. Paralysis of individual muscles and muscle groups may develop suddenly, or progressively, throughout this acute stage. As muscle tenderness indicates nerve irritation, as long as muscle tenderness is present further paralysis may occur. Likewise, the initial muscle paralysis may be minimal, involving only scattered weakened muscles, or very extensive with complete paralysis. When the diagnosis is substantiated a cursory muscle examination is made. The patient is made to attempt contraction of all the large muscle groups of the neck, abdomen, back and extremities. Any suspicious muscle weakness is noted. At the same time the tendon reflexes are elicited to substantiate the findings of the muscle examination. Often during the acute stage the patient is uncooperative and restless, and some ingenuity is required to obtain the needed information. As paralysis of a muscle or muscle group unbalances the normal control of the body segment involved, the normal tone of the healthy muscles produces a temporary deformity of the extremity. This temporary deforming stress associated with an unopposed pull of gravity places a stretching force on the weakened or paralyzed muscles. This, in turn, increases the pain in the involved muscles. It must be assumed that any or all of the involved muscles may recover, therefore, every body area with weakened or paralyzed muscles must be splinted in a neutral position. The persisting deforming power of the unopposed normal muscles will eventuate in ligamentous and skeletal deformity.

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The primary purposes of the treatment in the first stage of the disease are, therefore, the prevention of deformity, protection of the involved muscles, and the relief from discomfort. Cool, saline packs in most instances, combined with splinting, relieve the muscle discomfort. How should the involved muscles be splinted? The neutral position in which the muscles should be held in the acute stage is that position in which normal opposing muscles would be equally balanced. In the lower extremity the foot should be at right angles to the ankle, neither turned in, or out, the knee flexed about 30 degrees, and the hip slightly flexed and slightly abducted. With the knees and hips slightly flexed, the spine should be straight and flat on a firm bed, preferably with boards beneath the mattress. In the upper extremity the fingers should be slightly flexed with the thumb in the position were there a moderate sized ball held in the hand. The wrist should be dorsiflexed about 30 degrees, so that the base of the palm, the anterior surface of the wrist and the forearm form a straight line with the forearm, neither pronated nor supinated. The elbow should be flexed at a right angle. The shoulder should be at right angles from the body with the upper arm pointing straight forward. If the neck muscles are involved the head should be unsupported by pillows and held with the chin pointing forward.

These various positions may be maintained by simple means depending upon the ingenuity of the physician. On a firm bed, using ordinary pillows, correctly placed, a great deal can be accomplished. Temporary splints may be made by padding yucca boards, making wire splints out of coat hangers, or ordinary heavy wire bent and fastened with adhesive tape, or—best of all—moulded plaster splints. Irremovable or solid

plaster casts are not advisable during the acute stage. Daily, or on alternate days, the degree of muscle involvement should be checked, so that the splinting may be adequate.

THE CONVALESCENT STAGE

Following the disappearance of signs of systemic infection and muscle tenderness the convalescent stage has been reached. At this period a careful and complete muscle examination is made of the entire body, charting each muscle and muscle group on a special chart. A written record is made so that it may be referred to on subsequent examinations. Various systems are used for recording muscle power—the most common is as follows:

N—normal—ability of muscle to contract through its normal arc against gravity and considerable resistance.

G—good—ability of a muscle to contract through its normal arc against gravity and moderate resistance.

F—fair—ability of muscle to contract against gravity but without resistance.

P—poor—ability of muscle to contract only when gravity is eliminated.

Tr—trace—palpable contraction of muscle but without power to move extremity even with gravity eliminated.

O—gone—complete flaccid paralysis.

Considerable training and experience are necessary in order to make an accurate muscle examination, and in this stage of treatment an accurate examination is necessary.

Muscles may regain power quickly in a few days to several weeks or over a period of 12 to 18 months. In general, the more rapid or early return of power, the more complete it is. Under ideal treatment, as long as improvement occurs muscles should be protected from strain. If ideal treatment has not been given the period of recovery may be prolonged—up to three or four years after the onset of the disease.

What is ideal treatment? Briefly, protection from stretching and strain of involved muscles, and graduated active and assistive exercises—the type dependent upon the power of the individual muscle. Electrical stimulation and ordinary exercises, without attention to asymmetrical muscle weakness are not satisfactory. While muscle training in these cases must be supervised by one specially trained, a physician or preferably a physical therapist, in many instances intelligent members of the family may carry on the muscle training after receiving instruction.

Much has been said and written in recent times about under-water exercising. The only advantage of pool or under-water exercising is the fact that the buoyancy of the water partially eliminates gravity and lessens the weight of the extremity to be moved by the weakened muscle. Poor or inadequate muscle training in a pool is far inferior to adequate training by other means. Two time-tried methods have proved their worth. The first is by placing the limb on a smooth, well powdered board in such a way that the pull of gravity is eliminated during the exercising of the particular muscle involved. This necessitates the changing of the position of the extremity on the board for various different muscles and muscle groups. The second method, popularized by the late Dr. Gaenslen, utilizes simple slings suspended from an overhead frame over the bed, or from some other fixed object, which will allow the extremity to swing freely through the arc in which the involved muscle contracts. The principle of muscle training, then, is to combine active contraction of the involved muscles with gentle assistance in such a manner that the muscles are not strained or fatigued. The normal muscles are neglected intentionally in this muscle training, excepting that they are protected so that contractures or elongations may not occur.

Throughout the convalescent period the paralyzed or weakened muscles are protected by splints so that they may not become stretched. The fact that short periods without protection when the splint is removed, greatly retards the return of power, is overlooked frequently. At the time of removing the splints for muscle training or cleansing, the extremity should be held by simple means, such as pillows or a heavy, firm object so that the relaxed position of the involved muscles is maintained. This simple routine can be taught the patient as well as the attendant and is of inestimable value. Occasionally, the protection of the weakened muscles is overemphasized to such a degree that one of the purposes of the splinting is nullified. As has been stated, splinting of involved extremities or areas of the body is done to prevent deformity and protect the weakened muscles. Maintaining an extremity in an over-corrected position for a long period of time may predispose the development of a deformity due to gradual stretching of the normal muscles, and the simultaneous development of capsular and fascial contractures. In general, therefore, the involved extremities or body areas should be splinted in as nearly neutral a position as possible and at the same time allowing complete relaxation of the weakened muscles.

At the conclusion of the convalescent stage, when there has been no improvement of muscle power for a period of at least three months under ideal conditions, in spite of some persisting muscle weakness or paralysis, there should be no deformities of the skeleton or fascial or capsular structures. In inadequately treated cases, the unbalanced muscle pulls produce all manner of deformities of the upper and lower extremities and of the spine. Unfortunately,

these deformities are seen frequently. Many of these deformities can be corrected surgically; some can not, but always in the presence of deformities the end-results of further therapy are less satisfactory. This is especially true of curvatures of the spine. With few exceptions, deformities of the skeletal apparatus can be prevented, if the tendency is noted early, and the manner of splinting is altered.

When should the patient be allowed up and when may ambulatory splints be used? This question is not answered easily, and the answer must be qualified. In cases with the lesion confined to one upper extremity, with an adequate brace bed rest is not necessary. With a lesion of one leg, complete bed rest need not be prolonged unless the thigh muscles are involved. If the thigh muscles are involved, as in the case of trunk muscles, spinal or abdominal, bed rest with splinting should be continued throughout the convalescent period. Exceptions must be made, occasionally, but the fact that complete control of the trunk and upper leg muscles can not be maintained unless the patient is recumbent must never be overlooked. An unnecessarily long period of recumbency will do no permanent harm, while too early ambulation can do great permanent damage.

THE STAGE OF RECONSTRUCTION

This stage of treatment is reached when at least 18 months have elapsed since the onset of the disease. A careful analysis of the patient is now made, noting types of deformities present, if any, degree of functional impairment, and last but not least a meticulous muscle examination, charting all of the muscles. Before planning operative procedures the special needs of the individual case must be considered. What type of work is the individual going to do? Can he or she carry on with a weak but well-balanced extremity, or must he or she have a firm stable extremity capable of doing rather strenuous work? And many more factors should be considered in each case.

The operative treatment varies in individual cases dependent upon the particular case, and whether or not there are deformities which must be corrected. In the absence of deformities, braces are often quite satisfactory. However, there are many most satisfactory operations which eliminate the need for braces, and often entirely correct deformities which have developed. While many of the operative procedures are relatively simple, judgment and special training are needed in determining exactly what operative plan is best suited to the particular individual. In the more complicated cases, several operations may be indicated. Which should be done first?

As this stage of the treatment should always be carried out by a qualified orthopaedic surgeon, no attempt will be made to list the exact method of correcting the many deformities, and methods of regaining stability in an unbalanced and unstable extremity. Suffice to say, that practically all of the residual deformities and unstable extremities and trunks can be materially and satisfactorily improved by judicious orthopaedic operations. Not infrequently plastic procedures on a contractured but weak leg which overcome the deformity, return the extremity to a balanced or stabile function so that in spite of weakness the extremity again becomes useful without external braces. By muscle or rather tendon transplanting operations, a deforming and unbalancing muscle may become a useful stabilizing muscle. A severely unbalanced, unstable foot may be made a stable, useful weight-bearing foot by stiffening or fusing certain joints. However, all of the time-tried operations must be specially chosen or modified for the individual case. Occasionally, an operation can not succeed sufficiently in stabilizing the extremity to allow discarding braces entirely, but may permit the use of a simpler and smaller brace.

Particular mention should be made of the treatment of abdominal and back muscle paralysis. Even under ideal treatment during the convalescent stage a mild curvature of the spine may develop. Once an unbalanced spine is allowed up a severe and unsightly deformity may become progressively worse. Before the deformity has progressed, during the third stage of the disease, treatment must be planned carefully. Fascial transplants can balance unbalanced abdominal muscles, and carefully planned spinal fusion operations can prevent future deformities. Mild spinal curvatures can be corrected by split casts, and severe deformities can be improved.

Summing up the management of the third stage by well-chosen operative procedures, practically every case can be made materially better functionally and, therefore, a happier and more useful individual.

CONCLUSION

The orthopaedic management of the anterior poliomyelitis case should be divided into three stages, the acute, the convalescent, and the residual or reconstructive. During the acute stage temporary splinting of the involved muscles or muscle groups is instituted. During the convalescent stage, lasting eighteen months to two years, splinting is used for the prevention of deformity and muscle training or re-education is carried out to obtain maximum muscle recovery and balance. In the final or reconstructive stage operative procedures are resorted to in order that deformities may be corrected, and unstable, unbalanced, and poorly functioning extremities and spine may be made stable and functioning without braces, or with the most simple type brace in the more severe cases.

707 RACE STREET.

A CLASSIFICATION OF TUMORS

Compiled by LAWRENCE A. POMEROY, M.D.
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With the assistance of the members of the staff of the Tumor Clinic

PART III

VIII. Teratoma

A. Dermoid Cyst (common)

B. Solid Teratoma (rare)
Cell masses of immature or organoid form can be traced to all three embryonal layers.

C. Embryonal Sex Cell Carcinoma (parallel to similar tumors of testis)

D. Chorionepithelioma

IX. Granulosa Cell Tumor (from forerunners of granulosa cells)

This tumor tends to produce overfeminization. It is usually benign but may be malignant.

X. Theca Cell Tumor (Loeffler[29] and Priesel).

Clinical manifestations similar to those of granulosa cell tumor. Probably some tumors diagnosed as ovarian fibromas are rarely theca cell tumors.

XI. Brenner Tumor (possibly of same origin as granulosa cell tumor)

This tumor has no endocrine function. It appears microscopically to be malignant but is usually benign (Meigs) [35].

XII. Arrhenoblastoma (testicular tubular adenoma) (this is classified separately but possibly should be included under VIII—Teratoma)

This tumor tends to produce masculinization.

XIII. Solid Lutein Cell Tumor

XIV. Secondary Tumor

A. Carcinoma
The most usual primary sites are carcinoma of stomach, intestine and breast (Willis)[58].

B. Krukenberg Tumor ("fibrosarcoma mucocellulare carcinomatodes")
The usual primary tumor is carcinoma of the stomach.

XV. Parovarian Tumor

A. Retention Cyst (common)
It is lined by a single layer of ciliated epithelium.

B. Other growths such as adenoma, teratoma, carcinoma and sarcoma have been referred to the parovarium, often on insufficient grounds.

2. TUMORS OF FALLOPIAN TUBE

I. Fibroma

II. Fibromyoma

III. Lymphangioma

IV. Adenoma (should not be confused with hyperplasia of epithelium in chronic salpingitis)

V. Adenocarcinoma (papillary)

A. Well differentiated

B. Partially differentiated

C. Undifferentiated

VI. Sarcoma (rare) (see Section U).

VII. Secondary Tumor

The usual involvement is by extension from carcinoma of the fundus or the ovary. Blood-borne metastasis from a carcinoma of the stomach has been reported (Stout)[51].

3. TUMORS OF UTERUS

I. Lipoma

II. Lipomyoma

III. Hemangioma

IV. Fibromyoma (commonest tumor of uterus)

V. Adenofibromyoma

VI. Adenoma (from glands of fundus)

VII. Carcinoma

A. Carcinoma of Fundus
1. Adenocarcinoma
   a. Well differentiated
   b. Partially differentiated
   c. Undifferentiated
2. Adenoacanthoma (probably due to metaplasia of the cells of an adenocarcinoma)

B. Carcinoma of Cervix
1. Squamous Cell Carcinoma
   a. Well differentiated
   b. Partially differentiated
   c. Undifferentiated

Cervical tumors are classified as follows by Moritz:[36] **Group a** was comprised not only of tumors which were keratinizing and tumors containing prickle cells, but also all of those in which the cells resembled those of the

upper layers of cervical epithelium. Group b consisted essentially of transitional cell tumors, although many of them were more or less differential in certain portions. Group c included undifferentiated tumors, many of which are composed of spindle cells, while others were so completely anaplastic as to be best characterized as carcinoma simplex.

The well differentiated type of Moritz corresponds to the squamous cell type of Schmitz,[42] the spinal cell type of Martzloff,[31] and, in a general way, to Grade 1 of Broders.[4] The undifferentiated type of Moritz corresponds to the unripe basal cell type of Schmitz, the fat spindle cell type of Martzloff and, roughly, to Grade 4 of Broders.

2. Adenocarcinoma (rare)
   a. Well differentiated
   b. Partially differentiated
   c. Undifferentiated

VIII. **Chorioma**

A. Chorio-adenoma Destruens (destructive placental mole)

B. Chorionepithelioma (choriocarcinoma)

C. Syncytioma

When the syncytioma is more diffuse and complicated by exudative and productive inflammation it appears to be well designated as syncytial endometritis.

The author who believes that he has obtained cures in any considerable number of cases of choriocarcinomas by any means must first triply assure himself that what the pathologist has called choriocarcinoma is not chorio-adenoma destruens, syncitial endometritis, syncytioma or even early normal gestation (Stewart)[48].

IX. **Sarcoma** (see Section U).

A. Myosarcoma or spindle cell sarcoma originating in a fibromyoma

B. Spindle or round cell form arising from uterine mucosa

C. Sarcoma Botryoides

A mixture of myxomatous tissue, smooth muscle and embryonal striated muscle cells.

This tumor may originate in the vaginal vault as well as in the cervix in children, and in the fundus in the aged.

D. Carcino-Sarcoma (the supposed carcinomatous portion may not be neoplastic)

X. **Secondary Tumor**

Blood-borne metastasis to the uterus has been seen most frequently in cases of mammary carcinoma (Willis)[58].

4. TUMORS OF VAGINA

I. **Fibromyoma** } Rare
II. **Myoma** }

III. **Papilloma**

IV. Cyst (fairly common)
The lining is low cuboidal or flattened epithelium. The probable origin is from embryonal remnants.

V. **Adenomyoma**

VI. **Carcinoma**

A. Squamous Cell Carcinoma
   1. Well differentiated
   2. Partially differentiated
   3. Undifferentiated

B. Adenocarcinoma (rare)
This may arise from embryonal remnants.
   1. Well differentiated
   2. Partially differentiated
   3. Undifferentiated

VII. **Sarcoma** (see Section U).
This may be of any type.
Sarcoma Botryoides may originate in the vaginal vault as well as in the cervix in children.

VIII. **Secondary Tumor**
Chorionepithelioma and carcinoma of the kidney may metastasize to the vagina by retrograde venous embolism (Willis)[58].

5. TUMORS OF VULVA

I. **Fibroma**

II. **Fibromyoma**

III. **Lipoma**

IV. **Cyst**
Cysts found in other skin areas occur. A cyst may arise in Bartholin's gland. Dermoid cysts are rare.

V. **Angioma**

A. Hemangioma

B. Lymphangioma

VI. **Adenoma**
This may arise from sweat glands or from Bartholin's gland.

VII. **Carcinoma**

A. Squamous Cell Carcinoma (sometimes as result of kraurosis)
   1. Well differentiated
   2. Partially differentiated
   3. Undifferentiated

B. Adenocarcinoma (rare)
Bartholin's gland is the probable origin.
   1. Well differentiated
   2. Partially differentiated
   3. Undifferentiated

VIII. **Sarcoma** (see Section U).

IX. **Melanoma**

X. **Secondary Tumor**

Chorionepithelioma and carcinoma of the kidney may metastasize to the vulva by retrograde venous embolism (Willis)[58].

THE GENITO-URINARY TRACT

SECTION Q

1. TUMORS OF KIDNEY

I. **Fibroma**

II. **Leiomyofibroma**

III. **Lipoma**

IV. **Adenoma**
- A. Alveolar
- B. Papilliferous cystadenoma
- C. Tubular
- D. Adrenal cortical
- E. Adenomyoma

V. **Cyst**
- A. Retention cyst
  1. Small and multiple
  2. Large and solitary
- B. Congenital cystadenoma (multiple cystic kidney)
- C. Dermoid cyst

VI. **Carcinoma** (most frequent renal tumor in adults)
- A. Clear cell type (Grawitz tumor)
- B. Granular cell type
- C. Alveolar adenocarcinoma

VII. **Hypernephroma** (very rare according to definition below)

(Clear cells plus elements that may arise from the adrenal medulla, such as the ganglioneuroma, the sympathicoblastoma, or the phaeochromocytoma are necessary for the diagnosis of hypernephroma) (Karsner)[25].

VIII. **Congenital Mixed Tumor** (embryonal adenosarcoma, Wilms' tumor, commonest renal tumor in children)

(Although many of the embryonal renal tumors of infants and children present a simple structure, the whole group must be regarded as related to the local teratomas) (Willis) [58].

IX. **Sarcoma** (very rare) (see Section U).

(It is more than probable that a large percentage of cases appearing in the literature under the heading of sarcoma would be more appropriately classified as cases of embryonal carcinoma or of mixed tumor of one type or another) (Graham)[20].

X. **Secondary Tumor** (from primary tumor of lung, thymus, breast, melanoma, and chorion-carcinoma) (Willis).

TUMORS OF KIDNEY PELVIS AND URETER

I. **Papilloma**

II. **Papillary Carcinoma**
- A. Well differentiated
- B. Partially differentiated
- C. Undifferentiated

III. **Squamous Cell Carcinoma**
- A. Well differentiated
- B. Partially differentiated
- C. Undifferentiated

IV. **Secondary Tumor** (rare, from melanoma and primary tumor of breast) (Willis)[58].

2. TUMORS OF BLADDER

I. **Papilloma** (common)

Rare:
- II. **Fibroma**
- III. **Adenoma**
- IV. **Myxoma**
- V. **Hemangioma**
- VI. **Leiomyoma**
- VII. **Rhabdomyoma**

VIII. **Carcinoma**
- A. Squamous Cell Carcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- B. Transitional Cell Carcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- C. Adenocarcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated

In the undifferentiated type it may be impossible to classify the tumor as squamous cell, transitional cell or adenocarcinoma.

"Carcinoma simplex" may be the only diagnosis possible.

If papillary structure is observed in any section of a tumor it is further described as "papillary". In cytologic examination of papillary tumors the examination of the pedicle is of special importance.

Some of the adenocarcinomas are mucinous in character.

IX. **Sarcoma** (very rare) (see Section U).

(*Continued in August Issue*)

TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by the Component Society, the Ohio Public Health Association

PSYCHOLOGICAL ASPECTS OF TUBERCULOSIS

Being able to say, "I had tuberculosis for four years and recovered" aided the author in securing the confidence of patients in a large tuberculosis sanatorium. The purpose of her investigation was to discover what mental hygiene and psychology had to offer in speeding the recovery of tuberculous patients.

Loss of Equilibrium—The condition of the tuberculous person is one primarily of loss of equilibrium—first of his body chemistry, and then of his family situation, his job, and his whole mental attitude. A financial problem is almost inevitably present. All of the patient's human relationships are shifted. The husband or wife, the parent or child, the lover or the beloved, the friend, the business associate, the employer or his subordinates—all take on a different aspect. The patient must think differently not only of them, but of himself. He must literally make himself over.

This can happen only gradually, through the continued responses made to the new situation. Our personalities cannot be changed overnight, but they are built up by using our various abilities, just as muscles are developed through exercise. The abilities are ours by inheritance, but what we do with them is our own responsibility. No magical power from the outside can do for a man what he himself must bring about. Psychology can help him to learn how this "will to live" as William James once called it, can be used to help and not to hinder.

Emotion, as the word implies, is a moving force. Energy in the organism means increased metabolism and discharge of nervous impulses. Emotional states lead to activity of the organism somewhere, either externally or internally. If activity of the body be curtailed as in tuberculosis, energy is discharged in worry, fretting and anxiety.

The Patient's Cheerfulness—The apparent well-being which so often accompanies tuberculosis is frequently a cloak for hidden fear; exaggerated cheerfulness may be a compensatory mechanism. Probe beneath the gay and hopeful exterior of the tuberculous person and one may find submerged feelings of dread and despair.

The answer to the emotional problem is, in brief, first to recognize the emotional source of cause of the disturbance, and then to use the released energy in some way which will bring full satisfaction. For the tuberculous patient, achievement is far more difficult than it is for the healthy individual. He is, moreover, denied the ordinary relief of moving from place to place, with its variation of social contacts, and the help of a change of occupation by which pent-up restless feelings may be worked off.

All of us need some central stabilizing influence to which we can refer the meaning of our lives. Religion is such a stabilizer, and its therapeutic influence should be utilized.

Psychology must do more for the solving of life's problems than to offer a stone in place of bread. Psychology is valuable in understanding emotions and how to deal with them. One of the most potent emotions is **fear**. Its results may be seen clinically, as for example, in restlessness, loss of sleep, dilated pupils, disturbed digestion, secretory changes, and even in some cases increased blood pressure and temperature. It has been shown that the bodily effects of fear and rage involve increased activity of some of the endocrine glands, which in turn are innervated by the sympathetic division of the autonomous nervous system.

A practical way of aiding persons who are emotionally disturbed is to let them talk freely to someone they trust. "Well, how are you today?" cheerfully uttered by the busy doctor or nurse without pausing, will not invite the patient to unburden his deepest anxieties.

Adolescents Need Help—When tuberculosis attacks the adolescent there is added reason for fortifying him with clear thinking, sympathetic understanding and intellectual honesty.

During the years of adolescence the psychological strains of living increase, along with the social responsibilities incident to growing up. The boy or girl becomes "self" conscious, not only by being easily embarrassed (which is the sense in which the term is most often used), but by the new feeling of "selfness" which begins to appear in the average child at about the age of twelve, together with the ability to deal with abstractions as well as with concrete objects. He becomes capable of regarding **himself** as apart from the surroundings which he has hitherto accepted without question. He can and often does challenge the established order beginning with home and parents and extending to the entire universe. This is a heady brew for the youngster, and in some instances it aggravates the emotional conflicts which an awarkening sex life have introduced, until a veritable inner chaos is the result.

The person with tuberculosis must learn not only to control his emotions, but to use emotional energy constructively. Psychology teaches that instead of negation and denial, we shall use redirection of energy, and reeducation of the individual.—Mary B. Eyre, Public Health Nursing, Vol. XXX, No. 5, May, 1938.

CASE RECORD PRESENTING CLINICAL PROBLEMS

A Man, Aged 62, Comes with Dysuria, Dies, Autopsy.

By HARRY L. REINHART, M.D.

A WHITE male, 62 years old, was admitted to the hospital with complaints of frequency, nocturia and burning on urination. The onset of these symptoms was about one year ago and they have progressively increased in severity. During the past three months his general health has been affected and he has lost 30 pounds in weight. He had gonorrheal urethritis some years ago. A diagnosis of chronic uretheral stricture was made from the above history and the passage of urethral sounds, and treatment accordingly instituted. Approximately three months prior to his admission he developed a marked dysuria and severe pains in his back, especially following urination, and his urine was often bloody. About two months before admission he noticed pus in his urine. During the three weeks prior to his admission he voided every 30 to 60 minutes, both day and night.

Physical Examination: On admission his temperature was 98°, pulse 88 and respirations 24. His blood pressure was 140/78. In spite of the alleged loss of weight he was definitely obese (200 pounds). His heart was moderately enlarged to the left and there was a loud blowing systolic murmur audible over the pulmonary area. The abdominal wall was heavily infiltrated with fat and solid organs were not palpable. The urinary bladder was distended and the prostate was hard and nodular.

Laboratory Examinations: The Wassermann and Kahn tests were negative. Blood Count—Hb. 8.8 gms; RBC 3,070,000; WBC 13,450. Differential leucocyte count—neuthrophil polymorphonuclears 70 per cent; lymphocytes 30 per cent. Urine—Alkaline in reaction; the specific gravity ranged from 1.009 to 1.013; albumin 200 mgm. per cent; sugar negative; no casts; WBC 6 to 9 per HPF; RBC ranged from 60 per HPF to gross blood in the urine. The phenosulphonephthalein (PSP) renal function test revealed a dye excretion of 10 per cent in two hours; the test was repeated four days later with no demonstrable excretion of the dye. Blood urea nitrogen —71 mgm. per cent and later 89 mgm. per cent (normal 15-20 mgm. per cent). The blood serum calcium was 9.5 mgm. per cent (modified Kramer-Tisdale method; normal 9-11 mgm. per cent) and the blood serum phosphorous was 5.5 mgm. per cent (Benedict-Theis method; normal 3.5-4 mgm. per cent).

Hospital course: On admission an indwelling catheter was inserted and bladder irrigations instituted after a bilateral vasotomy. Cystoscopic examination revealed an irritable bladder with marked injection of the trigone and a decrease in bladder capacity. A flat plate of the abdomen presented shadows in the region of the left kidney which were suggestive of kidney stones. X-ray of the bones revealed a slight generalized rarefaction. A ureterogram revealed a dilated ureter on the right side. His urinary output varied between 1400 cc. and 3000 cc. per day. The temperature fluctuated between 98° and 100°, pulse 70 to 100 and respirations 20-30. On the sixth hospital day an exploratory operation revealed a large cystic pyonephrotic mass with little, if any, kidney tissue discernable. A nephrostomy was made. The patient died in uremic coma 24 hours after operation.

Dr. Karl Klassen: Commentator:

We have evidence in this case history of an elderly individual, who developed urinary symptoms approximately one year ago, probably due to an old gonorrheal stricture. About nine months later other symptoms appeared which were suggestive of kidney stones—specifically hematuria and pain in the back. Urological examination revealed evidence of severe kidney damage and renal insufficiency. The urine was alkaline in reaction, had a low specific gravity, contained blood and pus cells, and the PSP excretion was reduced to 10 per cent in two hours. There was a constant and marked elevation of blood urea nitrogen. X-ray examination (flat plate) revealed a shadow, presumably of a kidney stone, in the region of the left kidney and since the available evidence suggested that the right kidney was probably the better one, a right nephrostomy was done.

Evidence of renal insufficiency, an alkaline urine, and X-ray demonstration of kidney stones should always suggest the possibility of a hyperparathyroidism in addition to the basic kidney disease. The blood serum calcium and phosphorous determinations as recorded are evidence that a hyperparathyroidism was considered. The normal serum calcium and phosphorous values obtained from these examinations, the lack of evidence of marked bone pathology by X-ray examination, and the precipitate termination of the clinical course are evidently factors which prevented a more detailed clinical investigation of this case in relation to hyperparathyroidism.

Although the urological aspect dominated the clinical course of this case, I should like to discuss the more frequently overlooked phase of hyperparathyroidism in relation to renal disease. Hyperparathyroidism is generally considered as **primary** when there is a tumor of the parathyroid glands (adenoma or adenocarcinoma), and **secondary** when there is a diffuse

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This is the thirtieth of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

hyperplasia of the parathyroid glands, secondary to kidney disease with a resultant disturbed balance between the blood calcium and phosphorous. The classical type of so-called primary hyperparathyroidism is characterized by a primary tumor (adenomatous enlargement) of one or more of the parathyroid glands. The symptoms are referable to the skeletal system and characterized by decalcification of bones, formation of bony cysts or tumors, frequent spontaneous fractures, and kidney stones. This type is called von Recklinghausen's disease.

The secondary type of hyperparathyroidism follows chronic progressive kidney disease. Any progressive disease of the kidneys may prevent the normal elimination of phosphates in the urine and result in the accumulation of increased amounts of phosphorous in the blood. The blood calcium and phosphorous act in a see-saw like manner; when the blood phosphorous goes up the blood calcium goes down and vice versa. The rise in blood phosphorous, due to kidney disease is followed by a lowering of the blood calcium. The blood calcium balance is maintained by parathormone produced by the parathyroid glands. The phosphorous retention or rise of blood phosphorous provides a stimulus to the parathyroid glands which results in an increased production of parathormone; if this stimulus is maintained, enlargement (hyperplasia) of the parathyroid glands may be produced. The effect of increased production of parathormone is the release of calcium from its storehouse, the bones, and a rise of the blood calcium. If the phosphorous retention continues, large amounts of calcium will be removed from the bones and while the blood calcium may be maintained at a normal quantitative level excessive amounts will be eliminated in the urine and feces. Although the calcium concentration in the urine may be high, this alone is insufficient for the precipitation of calcium phosphate and the consequent formation of kidney stones. The acidity or alkalinity of urine in the renal pelvis is the deciding factor. If the urine is alkaline, calcium phosphate is precipitated. As long as the urine is acid, the calcium phosphate remains in solution and kidney stones are not formed.

On the basis of this explanation of the mechanism of so-called secondary (to kidney disease) hyperparathyroidism, we may briefly reconstruct the clinical course of this case. Gonorrheal urethritis, chronic posterior urethritis, urethral stricture, obstruction to urination, hypertrophy and dilatation of urinary bladder, bilateral hydroureter and hydronephrosis, impaired renal function, phosphorous retention, parathyroid hyperplasia, infected hydronephrosis or pyonephrosis, precipitation of calcium phosphate in kidney tubules and pelvis producing kidney stones, hematuria, pain in back, pyuria, and uremia. If the kidney stones are unilateral, as the case history suggests, we may assume that the kidney without stones was destroyed by the hydronephrosis previous to the development of hyperparathyroidism. Otherwise the kidney stones should be bilateral. The bone lesions in hyperparathyroidism are considered a rough measure of the duration of the disease, not the intensity. On this basis, since there was a minimal amount of skeletal rarefaction, we may assume that the duration of the hyperparathyroidism was relatively short and the formation of kidney stones was fairly recent (within the past year?).

Although the bony changes in secondary hyperparathyroidism may be the same as those of the primary type, they are rarely as extensive since the renal insufficiency which is responsible for the secondary type often results in the death of the patient before the bony pathology is marked. Hence the prognosis depends upon the type of hyperparthyroidism. In the primary type, removal of the overactive parathyroid glands is indicated, but in the secondary hyperplasia such treatment will lead to hypocalcemia and tetany.

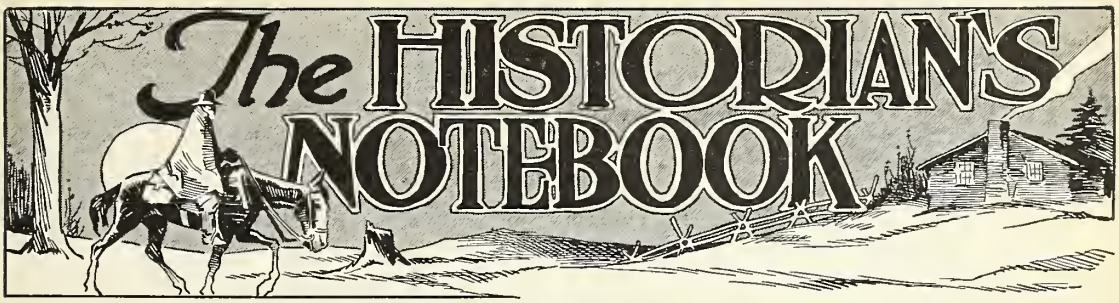
Dr. Reinhart: Anatomic Diagnosis:

1. Urethral stricture. 2. Hypertrophy of urinary bladder. 3. Bilateral pyonephrosis and pyoureter. 4. Kidney stones in pelvis and ureter of left kidney. 5. Parathyroid hyperplasia (540 mgm). 6. Edema of lungs. 7. Hypertrophy of heart (480 grams). 8. Moderate arteriosclerosis. 9. Ulcerative carcinoma of rectum. 10. Status post nephrostomy and vasotomy. 11. Obesity.

The hyperplasia of the parathyroid glands is confirmatory evidence of a secondary hyperparathyroidism. Four enlarged parathyroid glands weighing a total of 540 mgm. were discovered. The normal total weight of the parathyroid glands is about 260 mgm. This represents a hyperplasia of about 100 per cent. Probably no other organ in the body presents a comparable quantitative anatomical degree of hyperplasia. The microscopic examination revealed the characteristic aspects of hyperplasia, which may be readily differentiated from the adenomatous character of primary hyperparathyroidism.

Practically all kidney tissue was destroyed by the advanced bilateral pyonephrosis. Although the PSP was 10 per cent on one occasion and not discernable on another, the percentage of this dye excreted in cystitis and pyonephrosis is often unduly low and a bad prognosis should not be made on this basis alone. In such cases, if the obstruction is relieved and the infection controlled, a relatively good return of dye excretion may be subsequently obtained.

The ulcerative carcinoma of the rectum was an incidental autopsy finding.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

JOHN SHAW BILLINGS, MEDICAL STUDENT AND RESIDENT PHYSICIAN

By LEON GOLDMAN, M.D., Cincinnati, Ohio

PROBABLY the most noted of what Dr. William M. Millar calls the "goodly and famous medical crew who left Cincinnati" was John Shaw Billings. Tucker[1] considers Billings "incomparably the greatest figure ever to study medicine in Cincinnati". This exceptional personality has been honored recently in medical literature because 1938 is the one hundredth anniversary of his birth. He is still too little known, for he is that man who started the Index Catalogue, the first effort in the medical world to present properly collected and classified medical literature. He is the man who founded the Surgeon General's Library. Among the books and the pamphlets there, he said, "are a goodly number which came from the cellars and attics and dark closets of the houses of some of the old physicians of Cincinnati".[2] He is the man who was "one of the founding fathers of both the (Johns Hopkins) hospital and medical school".[3] He is the man who was the director of the New York Public Library. That is the famous Billings tetrad of accomplishments. These all were in addition to a brilliant army career,[4] an active and intelligent interest in hygiene, vital statistics and medical history. "With the single exception of Mitchell, he was certainly in solid accomplishment and versatility, the most remarkable American physician of his period".[5]

The greatest tribute to Billings is the biography by the noted medical historian, Fielding H. Garrison[5] and those who write of Billings borrow freely from this collection. Johns Hopkins has honored Billings recently by a joint meeting of the Johns Hopkins Medical Society and the Johns Hopkins Medical History Club on April 12, 1938, one hundred years after his birth. At this memorable meeting several papers on Billings were read. In Cincinnati, Billings has been mentioned proudly by Juettner[6] in 1909 in his encyclopedic review of medical Cincinnati, "Daniel Drake and His Followers", and also by the medical historian, David A. Tucker, Jr.,[1] in his "Notes on the Early Medical History of Cincinnati". Yet, years ago, most people did not appreciate the great work of Billings with the Index Catalogue and the Surgeon General's Library, for in the Cincinnati Lancet Clinic of March 10, 1888,[7] there is a brief note in the editorial column with the bald statement that,

"Dr. John S. Billings, a surgeon in the U. S. Army and graduate of the class of 1860, delivered the address to the alumni."

Of all his full and varied life his Cincinnati period is least known and perhaps even, least interesting. Yet in truth this episode made a tremendous and lasting impression on this bookish and intelligent country boy from Indiana. It is altogether proper to review some of his works, and triumphs, in that perturbed medical center, Cincinnati, 1858-1861.

A graduate of Miami in 1857, where he took second honors, he matriculated at the Medical College of Ohio in the autumn of 1858, at that time, on Sixth Street between Vine and Race. This old school had been founded in 1819. In 1857 the Ohio Medical College absorbed one of its local rivals, the Miami Medical College and made for a stronger and better teaching unit. In the "Thirty-Ninth Annual Announcement of Lectures of the Medical College of Ohio for the Ses-

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sion 1858-59,"[8] the following glowing advertisement appears,

In view of these extended means of Clinical Instruction, it may be safely affirmed, that the Medical College of Ohio affords opportunities for acquiring information in regard to diagnosis, causes, nature and treatment of the diseases of the Mississippi Valley, which can not be excelled in any other College, North or South.

Again, in speaking of the new College Building, this announcement states:

The new College Building recently completed at an expense of over $50,000, is not surpassed for elegance of structure and convenience of arrangement by any building of the kind in the United States. In its construction every care was taken to adapt it to the purposes to which it is appropriated. The best models of Europe were studied, and such improvements added as contribute largely to the comfort of both teacher and student.

The course began on the 15th of October and finished the last of February. Clinical Instruction was given at the Commercial Hospital, the City Dispensary and also at St. John's Hotel for Invalids. The faculty for the session 1858-59 was:

L. M. Lawson, M.D., Professor of the Theory and Practice of Medicine and Clinical Medicine.

Jesse P. Judkins, M.D., Professor of Anatomy.

George C. Blackman, M.D., Professor of the Principles and Practice of Surgery and Clinical Surgery.

George Mendenhall, M.D., Professor of Obstetrics, Diseases of Women and Children, and Clinical Midwifery.

C. G. Comegys, M.D., Professor of Institutes of Medicine.

James Graham, M.D., Professor of Materia Medica and Therapeutics.

H. E. Foote, M.D., Professor of Chemistry and Toxicology.

Thomas Wood, M.D., Professor of Microscopical and Surgical Anatomy.

John A. Murphy, M.D., Adjunct Professor of Theory and Practice of Medicine and Clinical Medicine.

B. F. Richardson, M.D., Adjunct Professor of Obstetrics, Diseases of Women and Children, and Clinical Midwifery.

William Clendenin, M.D., Demonstrator of Anatomy.

Billings' first lecture in medicine was an entire clinical presentation of four cases of chronic lung disease.

For the session 1859-1860,[10] Thomas Wood was no longer listed with the faculty and his particular position was abolished. John Murphy was now Professor of Materia Medica and Therapeutics, James Graham, Professor of Clinical Medicine, and B. F. Richardson now Professor of Diseases of Women and Children. In the catalogue of students for the session 1859-1860 there were 122 registered. John S. Billings' name is found in this list, his residence is given as Ohio and his preceptor, Professor George C. Blackman.

Among the very few well known personal aspects of his Cincinnati stay are his own revelations of his poverty. For the session of 1858-59, the following fees were listed:

For the whole course	$80.00
Dissecting Ticket	6.00
Hospital Ticket	10.00
Graduation Fee	25.00

For the session of 1859-60 the total fee schedule is the same. "Billings managed to pay his way through his medical course by residing in the hospital and later taking care of the dissecting rooms of the college".[5] One winter, he is reported to have lived on 75 cents a week. Billings himself attributed much of his suffering in later years "to the faulty and inadequate diet on which he lived while securing his education".[1]

In regard to his excellence and industry as a student there is very little known in the few records available but some conclusions can be drawn rather freely and liberally. Billings was a good student and a lover of books long before he came to the Ohio Medical College. It is safe to believe that he continued to retain those excellent intellectual habits. George C. Blackman was one of the most popular men on the faculty and he was the preceptor of Billings. In those days preceptorship was taken seriously by the faculty. Blackman continued to be interested in Billings

The following is a copy of the lecture schedule for the session 1857-58:[9]

MEDICAL COLLEGE OF OHIO

Order of Lectures

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8	Hospital	Hospital	Clinical Lectures in Hospital From 8 to 10½	Hospital	Hospital	Clinical Lectures at Hosiptal from 8 to 10½
9	Comegys	Graham		Graham	Comegys	Foote
10	Graham	Blackman		Blackman	Blackman	Wood
11	Lawson	Lawson		Lawson	Lawson	Lec. at Hos. on
12	Judkins	Judkins		Judkins	Judkins	Dis. of Women
2½	Dispensary	Wood		Wood	Dispensary	and Children
3½	Mendenhall	Foote		Foote	Mendenhall	

even after graduation so he certainly must have considered Billings above the average. In fact, in 1861, he offered to take Billings in partnership as his assistant. Billings was reported to be an intern at St. John's Hotel for Invalids in 1858-59. The annual announcement for the session 1858-59 states that "the faculty will also have the privilege of recommending two graduates as Resident Physicians to the St. John's Hotel for Invalids". As a student then, Billings was at St. John's (Prof. Blackman's influence?). This was a 75 bed new institution, at the northwest corner of Third and Plum Streets. The choosing, then, of one who was not a graduate physician must have been a distinct honor.

Little is known of Billings' actual work and skill at St. John's other than that he became a long time friend of that famous "Angel of the Battlefields", Sister Anthony, the story of whose pioneer work in many fields of endeavor is a very fascinating one. All the Sisters took an interest in Billings. "It is said that his grave, serious ways, his austere life, the look of mild melancholy in his blue eyes, won their regard in such wise that he became known among these ladies as 'St. John of the Hospital' ".[5]

There is still further proof that Billings was an excellent student of medicine. One of the qualifications for graduation was, "The student must deposit with the Dean a satisfactory thesis on some medical subject by the 1st of February."

Juettner[6] has some rather interesting comments on the subject of these inaugural theses:

The inaugural theses of the graduates were at one time quite a feature of commencement time. Most of them were read and immediately consigned to well-merited oblivion. That they served any good purpose, is more than doubtful, according to Gross. In most instances "the thesis was a more or less well-prepared hash, consisting of the opinions and views expressed by the teacher or gleaned from some book or journal. Most of the graduates of those days were not endowed with even a modest degree of literary ability. Their preliminary education was usually fragmentary, although a compensatory amount of common sense was not infrequent. As additions to medical literature most of these theses could hardly be taken seriously". Once in a great while a thesis of value was presented, e.g., John S. Billings' on "Epilepsy".

This particular thesis was remarkable in more ways than one. First of all is the oft repeated story of how the six month's difficult search for references is widely scattered literature led to dreams of a complete catalogue of medical literature. This was realized finally in the famed Index Catalogue. In this particular paper, "The Surgical Treatment of Epilepsy", there is a detailed review of the literature, including foreign journals. Such a careful and detailed listing of individual journals was very unusual for that period in medical literature. Usually no reference work was done in addition to abstracting local journals or there were quotations without any idea as to source. Sometimes there was a reference to a journal without any note as to the particular volume. Three cases are actually reported briefly and six other cases are mentioned from personal correspondence from Prof. Gross and from Dr. Charles Tripler, U.S.A. The last paragraph of the Billings' article is often quoted:

In conclusion, if the surgeon meets with cases, and they undoubtedly will be the majority to which none of the preceding remarks apply, and feels nevertheless compelled to do something, I should advise the application of the trephine, having first fairly explained to the patient the risk he is about to run, as all that can be said of any operation applies to this, and if it does not prove immediately fatal, and he reports the case early, say within the first month, it will, in very many cases, come into the list of cases of epilepsy cured by surgical treatment.

While the faculty undoubtedly considered Billings as an unusual student it is apparent that he did not consider the faculty to be too god-like. Even as a student, he realized the inadequacies of his course, for he said some 35 years later:[5]

In those two years I did not attend the systematic lectures very regularly. I found that by reading the text-books, I could get more in the same time and with less trouble. I practically lived in the dissecting-room and in the clinics, and the first lecture I ever heard was a clinical lecture.

He was influenced tremendously however by the two great men of the faculty, Blackman, his preceptor, and Graham, his "warm personal friend". He spoke again publicly of his debt to these two men as the commencement speaker March 7, 1888, at the sixty-ninth commencement of the Ohio Medical College in that "cosy little theater" in Cincinnati, the Odeon. This was some 28 years after his own commencement.

Billings, as a student, had excellent practical training in judgment of personalities and ethics in medicine. Though it was supposed to be "the era of perfect content", medically speaking, when Billings was in Cincinnati, yet there still were enough encounters, physical and verbal, to convince him that the turbulent and excitable medical history of Cincinnati continued. His own fearless and moody preceptor, George Curtis Blackman, was one of the most active of these medical fighters. Specifically these squabbles included controveries between men of different schools or between "those who filled chairs and those who did not", ancient medical battle themes which will continue to be found in all medical centers as long as physicians continue to be found to be human. Billings learned a lot which was not written in the books he loved so well. He learned to judge motives and character and ideals in medicine. This all aided him considerably in later life when he was placed in execu-

tive positions. This medical arena, not listed on lecture cards, was a very important part of his training in Cincinnati. Some years later, Billings[2] said of Cincinnati in regard to this kind of instruction, "but at all events its clinical facilities in this branch were excellent".

In the old "Cincinnati Daily Enquirer" of Saturday, March 3, 1860, the following paragraphs can be read:

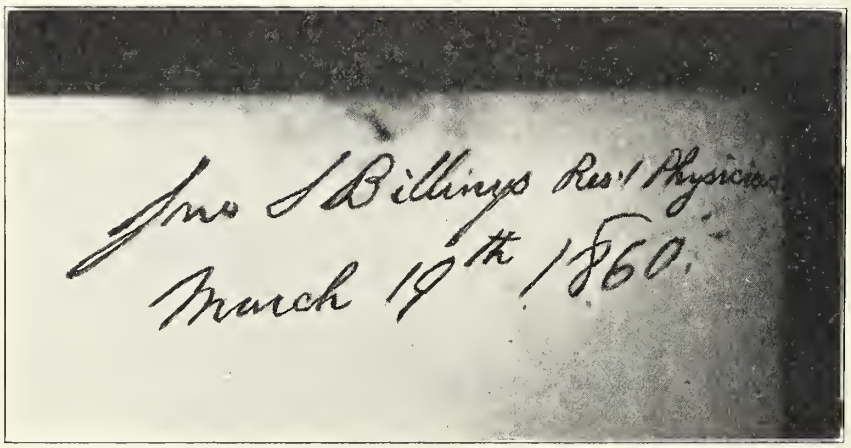
Medical College of Ohio—Close of the Fortieth Session.

A carefully prepared notice of the Commencement Exercises at the Medical College of Ohio, Thursday evening, at the close of the Fortieth Session, together with several other articles of general interest, was crowded out of our issue of yesterday by the heavy press of local matters upon our columns. The lower amphitheater of the commodious college building was crowded upon the occasion, by an intelligent audience, and the degree of Doctor of Medicine conferred upon forty graduates by John P. Foote, Esq., President of the Board of Trustees. The names and addresses of the graduating class are as follows:

G. Bambach	Ohio
Stephen R. Blizzard	Ohio
Wm. B. Cooper	Indiana
Andrew J. Corey	Ohio
Wm. B. Gibson	Ohio
Chas. R. Greenleaf	Ohio
Augustus Hoeltge	Ohio
James S. King	Illinois
Aaron J. Longfellow	Ohio
James F. Mitchell	Indiana
Jesse I. Pabamore	Ohio
David P. Smedley	Ohio
Joseph Steinriede	Ohio
Geo. M. Talfair	Ohio
Thos. M. Tucker	Indiana
John L. Wooden	Indiana
John S. Billings	Ohio
J. Newton Brown	Ohio
Robert N. Boyle	Ohio
Louis C. Fouts	Ohio
T. H. Green	Ohio
Wm. S. Hendricks	Indiana
Samuel V. Jump	Indiana
C. M. Lindley	Indiana
Wash. F. Mayne	Ohio
Wm. Muhle	Ohio
Samuel D. Richards	Ohio
Benj. F. Spencer	Ohio
David J. Swarts	Ohio
Eben C. Thomas	Virginia
Robert Wallace	Ohio

At the conclusion of the exercises in the College, the class repaired to the residence of Dr. George C. Blackman, corner of Eighth and Race Streets, where they were handsomely received by their host and his accomplished daughter. After partaking of an elegant supper, the company adjourned to the parlors, where an hour was passed in a highly agreeable manner, the recollection of which will ever be to the students a delicious momory.

Billings[2] spoke of this occasion, 28 years later,



From the Front Page of "Female M. & S. Ward, Commercial Hospital, 1860."

when he said, "when I was one of those impatiently waiting for the talking to be finished, so that we might actually grasp the coveted sheep skins". There are no records of any special prizes or honors which were given at the commencement exercises, when Billings graduated. However, Billings did get one honor not mentioned there. He was elected one of the Resident Physicians and Surgeons for the Commercial Hospital. In the Annual Announcement[3] of the College at that time, was this paragraph,

At the close of each session, three graduates will be elected to act as Resident Physicians and Surgeons in the Commercial Hospital for the ensuing year.

Billings then in 1860, after he graduated, was a resident at the city hospital of Cincinnati. This was called the Commercial Hospital because when it was built in 1823, through the graces of Daniel Drake, it was intended originally for the use of boatmen on the Ohio river. The hospital was used as one of the clinical units of the Ohio Medical College. At the time Billings served there the hospital had 150 beds, the buildings

even then were old and decaying. Billings spoke of the Commercial Hospital in 1888 when he said:

The men of my time will remember the old Commercial Hospital, with its pest house in the back yard, and its peculiar atmosphere; for ventilation was practically unknown and scarcely even spoken of in those days.

There are three ward record books of those particular days available, the male medical ward, the male surgical ward and the female medical and surgical ward. These books were brown leather covered ledgers, approximately 7 x 15 inches with an alphabetical index in the front part. The patient's history and progress notes were written by the residents themselves. It is interesting to note that these men called themselves "residents" and not "interns". From the names written on the flyleaf it is apparent that the three men elected, for that particular period, were John S. Billings, Augustus Hoeltge and Robert Boyle. On the fly-leaf of the "Female M. & S. Ward 1860" is the inscription, "Jno. S. Billings, Res't Physician, March 19, 1860". The first case history recorded, appropriately enough, was a case of epilepsy. Billings wrote an unusually long history and was exceedingly faithful with his progress notes. The patient incidentally, received no surgical treatment. The histories in these books, from the point of view of the senior clerk or intern of today, seem very sketchy and inadequate. From the types of script, Billings "seemed" to write somewhat longer case histories and somewhat more frequent progress notes. However, it must be admitted that such an observation indeed may be prejudiced. Personal remarks are largely absent from these histories. The following is one of Billings' histories in "The Female M & S Ward, 1860."

20. Ellen Queen, Admitted April 13th. American, Age 18, Married
Has been in St. John's Hospital for the last three months where she was esteemed a most notorious liar. She is pregnant probably in about the fifth month. Is a miserable looking woman, nervous and hysterical, has tried to poison herself twice at St. John's. Complains of great pain in both lumbar regions and difficulty in micturition. Pulse very weak—almost imperceptible. Appetite poor. To have quinine and hyoscyamus.
Apr. 17th. To have Potass. Acet. gr xv every four hours. Complains greatly of sleeplessness.
20th. Is in much the same state. Urinary trouble is as bad as ever.
21st. Discharged for impertinence.

Pulmonary complaints, "ague", and diarrhea seem to be especially common. There are occasional short descriptions of post mortem examination also. Relatively few of the histories contain any notes of recommendations by the staff men.

On the fly-leaf of the "Male Medical Ward 1860" there is written (Boyle's writing?):

Robert Boyle, John Billings and Augustus Hoeltge, Resident Physicians for the year of 1860.
Robt. Boyle Physician to the Medical Male Ward, for the months of M & A.
Augustus Hoeltge, May 10th-July 10th.

The last line is written in a different script (Hoeltge?). In this ward too pulmonary disorders and "ague" predominate. There is one excellent description of a case of rabies, by Billings.

310 Mathew Schurr, Adm'd Sept 4th
Single German, Age 35, Laborer
Says that 6 weeks ago he was bitten by a dog on the outside of the left hand. No caustic was applied to the wound and it healed up very readily. Says he has been sick 8 days but does not know much about it and his account can not be relied on.
Present condition
Lies very quietly for a while and then begins to scream and toss around. When questioned he appears to expell the words suddenly and forcibly and with apparent effort. Spits a great deal, has some difficulty in swallowing especially fluids. Tongue red at tip and edges furred in centre. Bowels have been regular. Pulse 120 irregular in frequency of modern force and volume. Expresses a decided aversión to the sight of water.
Injected 1/12 gr. atropine over each mastoid process.
Sept. 5th. At 4 P.M. Died. Had no convulsions up to the last moment.

The hypodermic injection is a rather interesting form of therapy for this period, as witness the following note from the Proceedings of the Wayne County Medical Association, Jan. 3, 1861, of the paper of Dr. M. C. West[12] on "Hypodermic Medication".

Among the many improvements and contrivances for the introduction of medicines into the system, and their applications to diseases, which have for the last few years filled an important place upon the pages of medical periodicals, and tell the unlimited variety and power of invention possessed by the human mind, is one which originated with Dr. Alexander Wood, of Edinburgh, and was brought out by Charles Hunter of London, under the name of the "Hypodermic Method", in which the medicinal agent employed is injected into the subcutaneous cellular tissue, by means of a small syringe.

Wood's method for the cure of neuralgia was mentioned and recommended by Billings in his paper on Epilepsy.[11] Billings took his famed hypodermic syringe with him when he assumed his army duties.

In the ledger "Male Surgical Ward 1860", the following inscription is found written in a flowing script (Hoeltge?)
Augustus Hoeltge
John F. Billings
Robert Boyle
Resident Physicians, 1860-1861

The first history is dated March 12. The progress notes, of latter dates, are apparently in Billings' writing. In one of the latter histories it is mentioned that Billings came on the ward May 8. One of the interesting features of this book is the fact that skin cases and especially

venereal diseases, were admitted in relatively large numbers to the surgical ward. In fact, Blackman, Professor of Surgery, diagnosed the first case "a combination of Lichen and Psoriasis Palmaris".

Billings, then, had a rotating internship with a goodly array of varied clinical material. He, in common with the other residents, seemed to have had a lot of responsibility at times, for he mentions that he was "practically alone for the next six months the staff not troubling themselves very much to come during the summer months when there was no teaching".[5]

Following this work at the Commercial Hospital Billings was again honored by medical Cincinnati by his appointment to the faculty as demonstrator of anatomy. His Cincinnati period finished when after refusing Blackman's very generous and flattering offer in 1861 he appeared before the Medical Examining Board of the Regular Army, surprised and pleased them by his brilliant examination and was appointed First Lieutenant and Assistant Surgeon on April 6, 1862.

We have seen, then, how medical Cincinnati took this understanding reader of books and with its own personalities and facilities continued to shape his life in good fashion. Billings had to work hard and under difficulties but the city encouraged him, rewarded him, and showed him openly its glaring weaknesses and faults. Then she passed him proudly on.

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The Ohio Medical History Committee recently received from Dr. George F. Beery of Lancaster, Ohio, the Minute Book of the Medical Society of the Thirteenth District of Ohio, 1824-1832, found in E. B. White's drugstore in Lancaster. This has been properly acknowledged and placed in the library of the Museum.

History of Medicine in Ohio

On Thursday morning, May 12, 1938, the initial meeting of the Ohio Committee on Medical History and Archives of the Ohio State Archaeological and Historical Society was held at the Neil House, Columbus, Ohio, in connection with the Annual Meeting of the Ohio State Medical Association. Dr. Jonathan Forman, Columbus, editor of the Ohio State Medical Journal, presided as chairman of the Committee.

Dr. Forman explained briefly the origin of the Committee. On September 27, 1937, a memorandum proposing such a committee was submitted to Dr. Forman by Dr. Paterson, executive secretary of the Ohio Public Health Association. The matter was then taken up with Secretary Lindley, of the Ohio State Archaeological and Historical Society. On October 26, the Board of Trustees of the Society approved the plan and authorized the appointment of Dr. Forman as chairman and Mr. Lindley as secretary with power to enlarge the committee as events dictated. Letters of invitation to serve on the committee were then sent to a list of individuals throughout the state who were known to be interested in the subject.

Subsequently the Council of the Ohio State Medical Association and the Executive Committee of the Ohio Public Health Association approved the project. There are three principal medical educational centers in Ohio which are the natural focusing points for the assembling of such material and the creation of the State Committee is to give added impetus to the work which has been going on in these centers for some years past.

The Ohio State Archaeological and Historical Museum on the grounds of the Ohio State University, Columbus, will become the custodians of all the material acquired in the name of the Committee. It is the desire of the Committee to secure everything relating to the practice of medicine, including dentistry, pharmacy, nursing and like activities. Books, reprints, transactions, instruments, prescriptions, account books, saddle bags, instrument cases, diplomas, letters, diaries, genealogies and photographs—anything pertaining to the early practice of medicine in Ohio from 1788 to 1890 are especially desired.

It was agreed that the Committee plan for a section meeting in connection with the next annual meeting of the Ohio State Archaeological and Historical Society in April, 1939, and Dr. Forman appointed a committee to assist him in this project consisting of Drs. Robert G. Paterson, Harry L. Reinhart and Donald D. Shira. It was also decided to continue the breakfasts in connection with the annual meetings of the Ohio State Medical Association.

Do You Know - - -

Names of the section officers of the Ohio State Medical Association for 1938-1939, elected at the recent Annual Meeting, are published on page 742, this issue of *The Journal.*

* * *

A city ordinance requiring domestic servants in Dallas, Texas, to have routine Wassermann tests became effective January 3, 1938. Since that time approximately 5,000 maids have been examined and 32 per cent were found to be infected.

* * *

A history of the 112th Medical Regiment of the Ohio National Guard, appears in the May, 1938, issue of *The Military Surgeon.* Colonel Harry D. Jackson, Circleville, is commanding officer of the regiment.

* * *

The year 1937 was the record health year of all time among the 17,700,000 industrial policyholders of the Metropolitan Life Insurance Company—a group composed almost entirely of wage-earners and their dependents. The year established the new low mortality rate, for all causes of death combined, of 8.221 deaths per 1,000 insured lives, a decline of 2.1 per cent from the figure registered for 1936.

* * *

Under a new law enacted by the Province of Ontario, provision is made for the appointment of a commission with power to require any person in the province to submit to it any substance or method of treatment used for cancer. The commission may investigate the merits of the remedy and issue a public report of its findings.

* * *

The American College of Surgeons has raised the requirements for fellowships for those whose medical degrees shall be obtained after January 1, 1938. The new requirements are three years of hospital service in approved hospitals, two years of which shall be devoted to surgery.

* * *

Only one in every 24 adults in the United States pays income tax.

* * *

Refusal of City Manager Sherrill to permit "The Birth of a Baby," approved by Ohio Film Censorship Board, to be shown in Cincinnati was overruled by the Hamilton County Common Pleas Court in upholding legal action instituted by The American Committee on Maternal Welfare, Inc.

* * *

The amount of radium in the United States has been estimated at 225 grams.

According to the *Illinois Journal of Medicine,* John Graunt, an Englishman, published the first book on vital statistics in 1662. He was the first to note from the bills of mortality that more boys are born than girls, and that the population can be estimated from an accurate death rate.

* * *

An antivivisection bill initiated in California will be voted upon in the November election. Its proponents have named it the "Human Pound Law".

* * *

There are approximately 500,000 diabetics in the United States, and at the present rate of increase, that number will be doubled 10 or 20 years hence, according to estimates made in a recent issue of *Public Health Reviews,* monthly publication of the Division of Hygiene and Public Health, University of Michigan.

* * *

The Advisory Council of the Social Security Board advocates the inclusion of employees of non-profit, religious, charitable and educational institutions under the old-age insurance program of the Social Security Act.

* * *

Theodore Wiprud, executive secretary of the Milwaukee County Medical Society for nine years, has been appointed secretary of the Medical Society of the District of Columbia. James O. Kelly, Milwaukee, succeeds Mr. Wiprud.

* * *

There were 12,454 cases of diphtheria reported in Ohio in 1922. Last year there were 1,276. Counties reporting no diphtheria during 1937 were: Ashtabula, Carroll, Crawford, Darke, Holmes, Knox, Mercer, Noble, Fairfield, Fayette, Fulton, Geauga, Portage, Sandusky, Williams and Wyandot.

* * *

Henceforth no laboratory advertisements will be accepted by the *Journal of the Kansas Medical Society* unless the institution is operated by a doctor of medicine.

* * *

At a recent meeting of the American Foundrymen's Association in Cleveland, Dr. Leonard Greenberg, executive director of the division of industrial hygiene, New York State Department of Labor, stated that a study of 5,000 foundry workers made by his division in that state showed that seven-tenths of 1 per cent had tuberculosis; 4.5 per cent had fibroids or mild dust irritation, and 2.7 per cent had silicosis.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Were the Postgraduate Lectures Worthwhile? We Are Voting "Yes"

At the time of the opening of the recent series of Ohio State Medical Association Regional Postgraduate Lectures at Chillicothe for the counties of Region B, the *Chillicothe Gazette* published an editorial entitled, "We Progress", in which a distinct tribute was paid to the medical profession.

Anything which will inspire the press to compliment the medical profession, as is done in the following excerpts from the editorial referred to, has merit:

"It is a far cry from the first organization of the medical fraternity in Ross County today. Back in those early days when Dr. William Latta was the president of the society the meetings dwelt more particularly upon fees and equities in patient treatment than in a postgraduate study of well known ailments, such as is scheduled to be held here on Thursday at Elks' hall.

"However, from that first organization, following the Civil War, up to now, the medical fraternity in city and county has ever made effort toward learning the latest discoveries in medical science and that is still the case today as shown in the opening of the postgraduate lecture series, which will see experts giving forth facts and experiences which will benefit local practitioners.

"The doctors from 19 southern Ohio counties will be in attendance and the subjects discussed are chosen from medical experience as among those where greatest progress is being shown in medical study.

"Such a series of postgraduate lectures cannot help but be beneficial, not only to the doctors themselves but to all of their patients. In this instance, the postgraduate series brings the training and information to the physicians instead of forcing them to make trips to metropolitan centers to get first hand information of the advance of science against disease.

"In this latter day program, the local medical fraternity is to be congratulated upon keeping abreast of the times and in clothing themselves with information which will be of general benefit locally."

As pointed out in the above comments, the profession and the public both benefited from the Chillicothe meetings. Incidentally, the total attendance at the eight meetings was 1,122 with an average attendance of 140. Individual physicians attending at least one session totaled 301.

Success of the postgraduate meetings in Northwestern Ohio and South-Central Ohio is a tribute to the profession generally, especially physicians practicing in those parts of the state, the Committee on Education and the Sub-Committee on Regional Postgraduate Lectures which arranged the program, and the lecturers who contributed time and ability without remuneration.

This new project by the State Association has clicked. It should be continued with greater enthusiasm. Present plans are to do so and arrangements already have been made to hold a series of similar meetings next Fall in Mansfield, Zanesville and Dayton-Springfield. Before the end of the year well over half of the members of the State Association will have had a chance to participate in these "refresher courses". The others, located for the most part in metropolitan centers, are well taken care of through local postgraduate courses sponsored by local academies.

The constant restless changing of the body of medical knowledge in all of its phases makes it imperative that the practitioner be ever alert to acquire new knowledge which may benefit his patients.—Southwestern Medicine.

Even a Good Thing Can Be Overdone—Such as Use of Lantern Slides

Speaking of postgraduate lectures—medical meetings generally, as a matter of fact—we can't resist quoting from an editorial which appeared recently in *The Virginia Medical Journal.*

The author of that article raises an important point about the excessive use of lantern slides. There is a lot of common sense in what he says. Although it may hit pretty hard, and some who are much in demand as speakers on medical programs may not agree, the comment is presented as food for thought to those who are anxious to improve their technique so that they will have a greater appeal to the average medical audience. Quoting:

"Something ought to be done about it,—about this growing, vicious, expensive custom of showing slides at medical meetings. Time was when no one thought of slides. One read one's paper and went home. But then it became fashionable, especially if one could afford it, to show a few slides at the end of one's paper. Now the style of hats has changed even more radically. Everybody must show slides, and the helpless audience is overpowered with a deluge of screen presentations which flicker on and off through the whole meeting.

"In these days a paper without slides seems to be considered dull as ditch water—there is no action in the drama—and the success of a presentation, in the author's mind at least, seems to be proportional not only to the number of his

slides but to the rapidity with which they can be shown without retarding his flow of language.

"This is the worst of all, this habit, which is getting to be quite the rage, of having slide after slide flashed on the screen while the essayist goes merrily on reading a paper timed to the split second to get under the tape before the allotted time is up. How any audience could listen to a paper with its ears, look at a rapid succession of screen flashes with its eyes and register anything but confusion on its brain is passing comprehension.

"Of course some slides are useful. Many are abominable. They are illegible because their lettering is too small, because they are congested with too many facts and figures or because they are confused with decimals, fractions, asterisks, etc.

"It takes a special intelligence to prepare a slide and a special intelligence to present one. A slide should be so clear that no explanation is necessary, and the speaker should be so anxious to establish its clarity that he will take time to explain it even if it be a simple one. If it is worth his using, it is worth his time in explanation.

"Something ought to be done about this slide business if only to save from madness the chronic attenders of medical meetings who still labor under the delusion that such a gathering is a place to learn and who therefore insist on staying through even the longest scientific session."

Honest elections are the best protection a nation can have against social disorder and enemies from within.—United States News.

What Do You Know About Candidates for Next Legislature?

This Summer and Fall the voters of Ohio will nominate and elect candidates for the Ohio General Assembly, elective state and county offices, and the national Congress.

It is time that physicians as citizens do some serious thinking about this important obligation of citizenship. Right now is the time for physicians to begin scrutinizing candidates and give their support to those who measure up to certain qualifications for the office sought. After the elections is too late. It is especially vital that physicians should be familiar with the attitude of candidates regarding medical and public health questions.

Raymond Moley, writing in *Newsweek*, about the present state of the nation, spanks the average businessman for being so apathetic regarding politics generally and especially with respect to an active interest in campaigns to elect qualified men to national and state legislative bodies. Wrote Mr. Moley:

"The job of dispelling confusion and ignorance begins at home—with self-education, with study of each citizen's Senators and Congressmen, of the significance of those votes, with a decision as to the competence of these men and with a search for more able candidates if the incumbents do not deserve re-election. It culminates in active support of the most worthy candidate, regardless of his party label. It devolves upon every citizen of a democratic representative government. And since the businessman is also a citizen (a fact not always remembered in high Administration circles these days) it properly concerns him.

"In the past, businessmen have not been especially effective in politics. This is so because of many circumstances—among them the indifference of businessmen to political affairs, their habit of delegating their political responsibilities to large and usually futile organizations, their tendency to contribute unnecessarily large sums to political campaigns and their occasional attempt to coerce employes and stockholders to support of their political views.

"These mistakes are easily avoidable. The businessman, working as an individual, and through a party wherever possible, must bring to bear his own brains and efforts in support of the most available candidate. He must learn that district and state political campaigns need not and should not be financed by large sums. But he should contribute some money within the limits prescribed by the state and Federal laws. He must use his personal influence by word of mouth if he can speak, by letter if he can write and by telegram if he is in a hurry (despite the activity of certain Senate committees, it should be remembered that it is still not criminal to send letters and telegrams in this country) to present the issues cogently and persuasively to his fellow voters."

Substitute the word "physicians" for "businessmen" in the above and you have a pretty useful lesson for the medical profession.

What are the qualifications for a legislative post—state representative or state senator, for instance? Obviously, the range of qualifications will differ in ratio to individual opinions. Here are six questions proposed by the head of the Ohio Farm Bureau Federation as a possible basis for each farmer to use in determining the fitness of candidates for the next General Assembly:

"1. Does the candidate measure up in personal appearance, general ability and proven gentlemanly behavior to what I would want my representative in governmental affairs to possess?

"2. Is he active in community affairs—church, school, organization and other means of making my country and community better?

"3. What are his personal business interests? Will he, because of them, when put to the test, decide impartiallly in favor of the people instead of his personal interests?

"4. Who are his promoters for public office—the people generally or some political or business organization that may be thinking more of its own interest than those of the people?

"5. Is his general character stability such as to make him immune and impartial to selfish lobby influences in carrying out his public responsibilities?

"6. Does he possess the qualities from which true statesmen are made, or will he be the ordinary run-of-mine politician, or even worse, a demagog?"

We are not advocating necessarily that physicians use the above formula in selecting "qualified" candidates. However, we do believe that they must adopt some formula; carefully scruti-

nize the records of those seeking re-election and make an effort to find out something about the "unknowns". The legislative committeemen and committees of the various county medical societies can be of great assistance for in the final analysis one of the chief functions of such committeemen or committees is to obtain and furnish information on candidates to their respective colleagues.

We need to cultivate among ourselves wisdom, cooperation, realism and courage—we will need them all.—Dorothy Thompson.

Opinion Must Not Be Tempered By Amount of the Fee Offered

Some advice which can't be denied as sound and pertinent was offered recently in *Minnesota Medicine* by the Medical Advisory Committee of the Minnesota State Medical Association. After reading the following quotation from that committee's comments, all must admit that there are examples right here in Ohio where physicians are making the ideals, ethics and reputation of their chosen profession subservient to selfish interests and "the pot of gold":

"Today, as never before, professional groups are being scrutinized by lay people, and every opportunity is taken to deride and break down the time-tested ethics of these groups.

"Your Medical Advisory Committee believes that perhaps we, the members of the medical profession, are at fault to a great extent in this loss of confidence, that the dignity of our calling is being lost sight of by us in the search for the 'pot of gold'. Especially is this true when we find doctors testifying in court on a contingent basis, their fees depending on the winning or losing of the case at hand. Will their testimony be unbiased and for the best interest in a court of justice under this arrangement? Does it not bring disrepute on all medical testimony to sell our knowledge for a 'mess of pottage'? Why not be honest with ourselves and the lawyers in the case—an honest fee for an honest opinion."

"The Principles of Medical Ethics, Article VI, Section 5, reads as follows:

"It is unprofessional for a physiican to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary or compensation received to accrue to the lay body or individual employing him. Such a procedure is beneath the dignity of professional practice, is unfair competition with the profession at large, is harmful alike to the profession of medicine and the welfare of the people, and is against sound public policy."

"This means that entangling alignments between doctors and lawyers are against sound public policy, and no member of our association should be guilty of such conduct. Remember, 'As ye sow, so shall ye also reap.' If we are going to elevate our standing in the eyes of our communities, we must do it ourselves. 'Honesty is the best policy' in court as well as in other types of consultation."

When will some physicians learn that "selling out" to the commercial side may have its bright side momentarily but that in the long run the practice is bound to kick back not only on the offending individual but on the profession as a whole?

As stated above, "an honest fee for an honest opinion" is the correct principle for both layman and physician to follow. When the character of the opinion (services, for that matter) is tempered by the size of the fee, everybody suffers.

If those idealists who are genuinely concerned over the plight of the people really wish to do something for the health of the population they might look into the matter of meeting adequate nutritional requirements for all.—Northwest Medicine.

Some Pointed Facts About Hernia Problems of Industrial Commission

One of the most aggravating medical problems arising under the Workmen's Compensation Act is that involving traumatic hernia. It causes the Commission more grief and opens the gate to more arguments than almost any other single question coming before that department.

In the first place, there is delay in adjudicating such cases because they require careful and usually extensive investigation from a legal standpoint. Many "traumatic" hernias are found after thorough investigation not to be the result of an accident as defined by the Workmen's Compensation Act and for that reason are not compensable.

Secondly, there is delay in some instances on the part of the Commission in granting permission to surgeons to operate on hernia cases after the case has been given a clean bill of health legally speaking. There seems to be little or no excuse for this delay. However, it must be borne in mind that the Commission is confronted with numerous complicated problems and that its routine is enormous, making it impossible for it to function as rapidly as desirable in some instances.

In the third place, some physicians maintain an arbitrary attitude with respect to hernia cases which makes prompt adjudication impossible and deprives the patient of immediate and necessary medical care.

For example, occasionally a physician insists

that a certain case of hernia is "traumatic" in origin in the face of conclusive evidence that the hernia had been present for a long period of time. Out of consideration for the physician, the legal department of the Commission is forced to make an extended investigation before a final decision rejecting the claim can be made.

Here is another situation which causes difficulty: Some physicians insist on having written permission from the Commission to operate before operating, although immediate operation is indicated. Obviously, before the Commission can give written permission to operate it must have the approval of the legal department to the effect that the claim is compensable. This means investigation and delay.

The practice followed by some surgeons would seem to be the desirable one. When they have decided that a hernia case needs immediate surgical attention, they operate and then let the case take its natural course through the Commission. If the case is allowed, the surgeon is paid by the Commission for his services. If the case is disallowed, the surgeon must look to the claimant for his fee. In any event, the patient has received the care which he needed and the surgeon is no worse off than he would have been had the patient not been employed at the time of the emergency. This would appear to be the sound procedure, medically and professionally.

Some of the difficulty with respect to hernia cases can be alleviated, if the Commission will make an effort to speed up investigations and all physicians will take a sensible attitude in handling such cases.

In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.—Virginia Medical Monthly.

Columbus Academy First Postgraduate Day Is Outstanding Success

Our hat is off this month to the Columbus Academy of Medicine. Starting at scratch, the Academy staged on June 2 a Postgraduate Day program in Columbus which it hopes to make an annual affair. Approximately 300 physicians from Central Ohio attended. The program presented by three guest speakers was one of the best ever sponsored by the Academy.

Officers and the program committee of the Academy are to be congratulated on the success of their venture. It has placed the Columbus Academy in a category with other large academies in the state. Continuation of this project annually will give to Central Ohio physicians opportunities which those of other parts of the state have had through similar programs sponsored by other large local medical societies. Meetings of this kind demand considerable time and work on the part of a few but in the end they are well worth the time and energy expended. Those who failed to attend the First Annual Postgraduate Day program of the Columbus Academy of Medicine were the real losers.

There is a short rule for obtaining the confidence of your community—deserve it.—Oliver Wendell Holmes.

Medical Program for Farm Security Clients In Logan County

During the past few months, officials of the Farm Security Administration in Ohio have conferred with a number of county medical societies regarding the establishment of a program to provide medical care for clients of the administration in those counties.

Readers of *The Journal* will recall that this question was before The Council of the State Medical Association on several occasions and that on July 11, 1937, The Council adopted a statement of policy and procedure for general application throughout the state and to guide local medical societies. (August, 1937, issue of *The Journal*, page 898). This statement subsequently was approved by the Farm Security Administration (then known as the Rural Resettlement Administration).

The first county medical society in Ohio to arrive at a definite agreement with the FSA was the Logan County Medical Society. That society made a thorough study of the question and went over the ground carefully before offering a plan for cooperation.

The statement of cooperation on which the medical program will be carried out in Logan County is sound and workable, offering ample protection to patient, physician and the FSA, providing a means by which clients of the administration may receive medical care and insuring physicians of compensation for their services. For the information of the membership at large and the guidance of other medical societies, the Logan County agreement is published:

"At the request of officials of Federal Farm Security Administration in Ohio and Logan County, the Logan County Medical Society and a special committee of that society have conferred on several occasions during the past few months with representatives of the Farm Security Administration for the purpose of discussing a practical means of supplying clients of that Administration in Logan County with necessary medical care.

"Realizing that medical care is a necessity; that it is an important factor in family rehabilitation; that medical organizations should

assist in establishing sound and feasible plans to provide the sick with necessary medical care; the Logan County Medical Society has decided to cooperate with the Farm Security Administration on the following basis, providing the principles and procedures set forth are accepted by the Farm Security Administration and adhered to by it and its clients in Logan County.

"1. The Logan County Medical Society recommends to its members that they cooperate with and assist the Farm Security Administration in providing clients of the Administration in Logan County with necessary medical care, but it shall be understood that participation by members of the Logan County Medical Society shall be on a voluntary basis.

"2. This shall not be construed as a contract between the Logan County Medical Society or any member of the society and the Farm Security Administration but shall be deemed an offer, which may be rescinded at any time, on the part of the society to assist the Farm Security Administration in formulating general policies and procedures for the guidance of participating physicians, clients and representatives of the Administration in this county.

"3. The policies and procedures herein enumerated shall be revised whenever changes have been agreed to by the medical society and the county administrator of the Farm Security Administration.

"4. Eligible clients, or patients, herein referred to shall be members of low-income farm families which are bona fide clients of the Farm Security Administration in Logan County and which have secured a loan for medical services from the Administration.

"5. Each eligible client shall have the right to select his own physician from the Logan County physicians who have indicated a willingness to participate in this program, provided the physician selected agrees to accept the individual client and his family as patients.

"6. The Logan County Medical Society will advise the county Farm Security administrator of the physicians who are willing to render service to eligible clients. The administrator will furnish the society and all participating physicians with a list of eligible clients. Such a list shall be revised monthly by the administrator for the information of the society and the participating physicians. The administrator, also, will furnish a list of participating physicians to each eligible client and provide each such client with a certificate showing that he is a bona fide client and has been granted a loan by the Farm Security Administration for medical service.

"7. Participating physicians will be expected to furnish eligible clients and their families the services usually rendered by a family physician. Services shall consist of home and office visits, including obstetrics and ordinary drugs but shall not include major operations and hospitalization, except in emergencies. Special arrangements shall be made for surgery and hospitalization through conferences between client, physician and local administrator. It is understood that in special cases requiring surgery and hospitalization, the Farm Security Administration will endeavor to make special grants or issue additional loans for the costs of such services. It is recommended that the local administrator encourage clients to visit participating physicians in their offices if at all possible, thus minimizing home visits and travel on the part of the physicians.

"8. Each participating physician shall have the right to use his own judgment with respect to fees, keeping in mind the character of the services rendered and that eligible clients are in the low-income class. Agreement as to fees shall be worked out jointly by the client and his physician. Continuation of services when the client's funds are exhausted shall be a matter for arrangement between the client and his physician.

"9. Funds lent by the Farm Security Administration for medical services to each client shall be held in trust by a trustee (or committee of trustees) selected by the Logan County Medical Society and acceptable to the Farm Security Administration. Such trustee shall give adequate bond. The trustee, upon receipt of a bill for medical services from a participating physician, shall pay such bill from the fund held by him for a client until such fund is exhausted. The trustee shall then notify the county administrator and he in turn shall notify all participating physicians of the exhausted fund.

"10. Each client, before applying for a medical service loan, shall discuss the matter with his physician so that he may have a better understanding of the possible medical and health needs of himself and his family during succeeding months.

"11. Each participating physician shall have the right at any time to request that his name be removed from the list of participating physicians.

"12. In case of any controversy, the question at issue may be referred to the Logan County Medical Society for adjudication by a standing committee or special committee of the society.

"13. The personal and confidential relationship which always should be present between physician and patient shall be maintained."

If you would create something, you must be something.—Goethe.

Publicity Is Not the Criterion for Judging Scientific Ability

"In deference to medical ethics which forbid personal publicity, The .....omits the names of the physicians."

This unusual sentence was tucked away in an article published recently by one of Ohio's leading daily newspapers, together with photographs, regarding an unusual operation performed at a hospital in that city which receives some support from the local Community Fund. The purpose of the article was to show the vital functioning of the fund.

The absence of names, in our opinion, did not detract from the interest and objective of the article. On the other hand, the article put across the basic idea without stating anything which could be interpreted as personal promotion on the part of the physicians participating.

It is refreshing to read a clipping of this kind,

especially at this time when far too many articles which can be construed as nothing more nor less than "personal puffs" for the physicians quoted are appearing in the daily press. The sooner more newspapers adopted an attitude of "deference to medical ethics" the quicker a more cooperative relationship between the press and the medical profession will take place.

A good point in line with this thought was advanced recently in the *Victor News*, publication of the General Electric X-ray Corporation, following the outburst of publicity concerning the Chicago baby suffering from glioma. The following excerpts in our opinion are especially pertinent:

"Early this month Chicago newspapers got together with medicine, though apparently not at the invitation of medicine in general, with the probable result that whatever progress may have been made toward more satisfactory cooperation between the medical profession and the popular press has suffered and will suffer a setback.

"The case was that of a five-week-old baby 'doomed to death, or a life of blindness,' as the newspapers put it, suffering from glioma. Spectacularly dramatized was the need for a decision by the child's parents between letting nature take its course toward inevitable death and an operation removing sight forever.

"Without question, there were aspects of the saddest possible nature involved—aspects on which newspaper sob-sisters could work their readers into a frenzy of agony. Screaming headlines, pictures of the principal, interviews with butchers, lawyers, and society women on what they'd do if it were their baby.

"If it wasn't a good story in its own right, the newspapers made it one, but in general didn't create an entirely favorable impression of the medical profession, nor an entirely fair one. Glioma may not be commonplace, but probably there were many other cases confronting Chicago doctors at the time that were at least as serious, if not as dramatic. Daily medical routine in any large city is crowded with cases which would make front-page copy if the sob-sisters could learn about them. And with all the alleged conferences and arguments among members of the profession publicized, it is just possible that the public might have been as thoroughly impressed with what seemed to be the uncertainty of the medical profession as with its dramatic fight to preserve life.

"All in all, the case seemed to be one of those which makes most doctors wary of the popular press, and consequently retards the development of a kind of cooperation and mutual understanding which would provide the public with information of a more desirable type."

Obviously, there are some instances where names of physicians must be used, and cannot be avoided, and criticism would be unwarranted. Nevertheless, such cases are few and far between. Some day the public will realize that publicity is not the criterion to be used in judging scientific and professional ability.

Three Additions Made to Medical Staff of the State Industrial Commission

The State Industrial Commission has announced the following appointments to the staff of the Medical Section, effective July 1: Dr. Carl H. Zinsmeister, Zanesville; Dr. Bertrum I. Firestone, Warren, and Dr. Jean Rogier, Columbus.

A graduate of Ohio State University College of Medicine in 1937, Dr. Zinsmeister has just completed his internship at City Hospital, Springfield.

Dr. Firestone served as an intern at Montefiore Hospital, Pittsburgh, after graduating at Ohio State University in 1937.

Following his graduation from Washington University School of Medicine, St. Louis, Mo., in 1934, Dr. Rogier was an intern and resident at New Haven Hospital, New Haven, Conn., for two years, and since October, 1937, has been assistant on the staff of Dr. George A. Curtis at University Hospital, Columbus.

Upon the completion of an intensive course of instruction in procedure under the Workmen's Compensation Act, it is planned to use the new appointees in the physical examination of claimants throughout the state for the purpose of estimating disability. They will be under the direct supervision of Dr. Sidney McCurdy, supervisor of the Medical Section, and will be attached to the Columbus office of the Industrial Commission.

COMING MEETINGS

Ohio State Medical Association, Toledo, May, 1939.

American Medical Association, St. Louis, 1939.

American College of Surgeons, New York, Oct. 17-21.

American Hospital Association, Dallas, Sept. 26-30.

American Public Health Association, Kansas City, Oct. 25-28.

Association of Military Surgeons of the United States and Canada, Rochester, Minn., Oct. 13-15.

Physicians Candidates for Congress

Among the candidates for Congress in the 22 Congressional Districts in Ohio are two physicians: Dr. William A. Quinn, Portsmouth, who is seeking the Republican nomination for the Sixth District (Adams, Brown, Clermont, Highland, Pike and Scioto counties), and Dr. Frederick C. Smith, Marion, Republican candidate for the nomination from the Eighth District (Crawford, Hancock, Hardin, Marion, Morrow and Wyandot counties).

DR. SLEYSTER, PRESIDENT-ELECT OF A. M. A.; ST. LOUIS CHOSEN FOR 1939 SESSION; NEW YORK IN 1940; CLEVELAND, 1941

THE House of Delegates of the American Medical Association during the Eighty-Ninth Session at San Francisco, June 13-17, selected the following meeting places for the next three annual sessions of the A.M.A.: St. Louis, 1939; New York, 1940, and Cleveland, 1941.

Dr. J. H. J. Upham, Columbus, completed his term as president of the American Medical Association at the San Francisco session. Dr. Irvin Abell, Louisville, Ky., was installed as president. The following officers were elected for 1938-1939: Dr. Rock Sleyster, Wauwatosa, Wis., president-elect; Dr. Howard Morrow, San Francisco, vice-president; Dr. Olin West, Chicago, secretary; Dr. Herman L. Kretschmer, Chicago, treasurer; Dr. Harrison H. Shoulders, Nashville, Tenn., speaker of the House of Delegates; Dr. Roy W. Fouts, Omaha, Nebraska, vice-speaker of the House of Delegates; Dr. Austin A. Hayden, Chicago, and Dr. Charles B. Wright, Minneapolis, re-elected to the Board of Trustees for terms expiring in 1943; Dr. John H. O'Shea, Spokane, Wash., re-elected to the Judicial Council, term expiring 1943; Dr. Frank H. Lahey, Boston, elected to Council on Medical Education and Hospitals (to succeed Dr. Frederic A. Washburn, Boston), term expiring in 1945, and Dr. James E. Paullin, Atlanta, Ga., re-elected to the Council on Scientific Assembly, for a term expiring in 1943.

President-Elect Rock Sleyster of Wauwatosa, Wisconsin, just outside Milwaukee, is 58 years of age and was graduated from the University of Illinois College of Medicine, Chicago, in 1902. He was secretary of the State Medical Society of Wisconsin from 1914 to 1923 and president in 1924. He has been treasurer of the society since 1925.

Dr. Sleyster was editor of the *Wisconsin Medical Journal* from 1918 to 1923.

In the American Medical Association he was a delegate to the House of Delegates from the State Medical Society of Wisconsin from 1915 to 1926. He was a member of the Board of Trustees from 1926 to 1937 and was chairman of the Board during the last two years of his service.

Dr. Sleyster is medical director of Milwaukee Sanitarium, at Wauwatosa. He is a fellow of the American College of Physicians and a member of the American Psychiatric Association, the Association for Research in Nervous and Mental Diseases and the Central Neuropsychiatric Association.

An account of the business transacted by the House of Delegates at the San Francisco meeting, together with a list of the Ohio physicians who registered at the meeting, will appear in the August issue of *The Journal*.

Those who traveled on the Ohio State Medical Association's Special Train were:

Dr. and Mrs. John B. Alcorn, Columbus; Dr. and Mrs. W. A. Baird, Toledo; Miss Luella Beeks, Cleveland; Dr. M. A. Blankenhorn, Cincinnati; Dr. O. S. Brigham, O. S. Brigham, Jr., Toledo; Mr. James Fitch Brooks, Portsmouth; Dr. and Mrs. C. E. Burgett, Dayton; Dr. and Mrs. C. J. Cassidy, Cleveland; Dr. and Mrs. W. K. Chamberlain, Tiffin; Dr. and Mrs. C. N. Clark, Canton; Dr. and Mrs. James T. Clear, Cincinnati; Miss June Cory, Cleveland; Dr. M. E. Coy, Dayton.

Dr. and Mrs. J. F. Driscoll, Dayton; Dr. and Mrs. B. M. Edlavitch, Ft. Wayne, Indiana; Dr. James W. Fitch, Dr. Clyde M. Fitch, Portsmouth; Dr. C. F. Garvin, Cleveland; Dr. Marion N. Gibbons, Shaker Heights; Dr. Karla P. Hahn, Cleveland; Dr. and Mrs. D. D. Hamlin, Alliance; Dr. Jerome Hartman, Dayton; Dr. and Mrs. B. J. Hein, Toledo; Dr. R. C. Hunter, Dr. and Mrs. Forest Hunter, Wapakoneta.

Dr. and Mrs. Fred G. King, Canton; Dr. and Mrs. Albert F. Kuhl, Dayton; Dr. and Mrs. Paul J. Leahy, Tiffin; Dr. Ben R. McClellan, Xenia; Mr. and Mrs. Charles S. Nelson, Columbus; Dr. and Mrs. Geo. E. Obrist, Dr. John W. Obrist, Miss Eva E. Obrist, Portsmouth; Dr. Benedict Olch, Dayton; Dr. and Mrs. C. M. Peters, Canton; Dr. and Mrs. C. E. Price, C. E. Price, Jr., Toledo; Dr. and Mrs. Joseph Price, Columbus.

Dr. Cora J. Randall, Cleveland; Dr. Ralph A. Scherz, Cleveland; Dr. Roy W. Scott, Cleveland; Mrs. W. G. Sibley, Gallipolis; Dr. C. D. Slagle, Centerville; Dr. and Mrs. Henry L. Sowash, Sandusky; Dr. and Mrs. E. J. Stedem, Columbus; Dr. Carl R. Steinke, Akron; Dr. and Mrs. H. F. Stires, Canton; Dr. and Mrs. F. P. Sutherland, Martins Ferry; Dr. T. W. Taylor, Toledo; Dr. and Mrs. Harold B. Thomas, Cleveland.

Dr. and Mrs. G. D. Underwood, Navarre; Dr. and Mrs. Thomas A. Vogel, Thos. Vogel, Jr., Mr. Frank H. Vogel, Columbus; Mrs. Charles Wales, Gallipolis; Dr. and Mrs. J. L. Webb, Nelsonville; Dr. and Mrs. Samuel J. Webster, Cleveland; Mr. Wm. C. Wendt, Columbus; Dr. A. M. Wilkins, Delta; Mr. and Mrs. Orville Wise, Newark; Dr. E. A. Murbach, Archbold.

Honor Youngstown Veterans

Members of the Mahoning County Medical Society paid tribute to Dr. Harmon E. Blott, Youngstown's oldest practicing physician, and five other veteran physicians at a testimonial dinner May 17 at the Youngstown Club. Dr. Blott, who recently completed 50 years in the practice of medicine, and Dr. Robert D. Gibson, Dr. John F. Lindsay, Dr. Raymond E. Whelan, Dr. Harry E. Welch and Dr. Thomas J. Arundel were made honorary members of the society.

SOCIALIZATION OF MEDICINE INEVITABLE ONLY IF DOCTORS SURRENDER, SAYS WRITER IN NATION'S BUSINESS

Nation's Business, published in Washington, D. C., by The United States Chamber of Commerce under the able editorship of Merle Thorpe, has kept a close tab on Group Health Association, Uncle Sam's trial balloon in the field of socialized medicine, underwritten by the Federal Home Loan Bank Board for employees of the Home Owners' Loan Corporation. Readers of *The Journal* will recall an article on that subject in the December, 1937, issue, reprinted from *Nation's Business*, entitled "The Taxpayer Pays the Doctor".

Another timely article appears in the June, 1938, issue of *Nation's Business*, captioned, "Socialized Medicine Is a Reality", and by special permission of the publishers is reprinted herewith. This well-written and interesting account of Group Health Association and its ramifications is "must" reading for every physician. Of particular significance, coming from an authoritative source, is the statement: "Complete socialization of medicine would appear to be inevitable only if doctors surrender to it".

SOCIALIZED MEDICINE IS A REALITY

By FRED DeARMOND

(Reprinted from *Nation's Business*)

THE American people never have voted to change their system of medical care to one in which the doctors work for the Government instead of for their patients. Their representatives in Congress never have voted such a change. Nevertheless, the first steps in that transition already have taken place. Whether we like it or not, we have the beginnings of state medicine in this country and taxpayers' money is paying for it.

Original blueprints of the Great Plan called for universal health insurance as a part of Social Security. But its vast scope and gigantic cost, not to mention determined opposition from the medical profession and the lay public, made it necessary to attempt this reform by indirection. Evidence that it had not really been shelved came last year in an inconspicuous news report that employees of the Federal Home Loan Bank Board had formed a Group Health Association to provide all needed medical care for the group. The F.H.L.B., through its director, had pledged $20,000 of public funds as a share in the support of the movement which the Government was to bear. The balance was to be paid monthly by the members. A like amount was promised for 1938. (See *Nation's Business*, November, 1937, "The Taxpayer Pays the Doctor".)

McCARRAN ASKS QUESTIONS

Then, down at the Capitol, Senator McCarran of Nevada wondered how the Government could thus be committed to so radical a departure without as much as a by-your-leave from Congress. To be sure, the G.H.A. was cloaked with the sacred vestments of employee welfare. It was merely a movement initiated by the employees of this one agency and no one else was to come in on it.

But the Senator knew that in Washington precedents of this sort spread like Russian thistle, that if one independent bureau could get the Government to add part of the cost of doctors and hospitals to the salaries of employees, others could and would follow suit. From that it would be but a step for the taxpayers to provide free medical care for all Government employees, and another step for it to be offered to all citizens.

So he asked the General Accounting Office if this action was according to Hoyle.

R. N. Elliott, Acting Controller General, studied the matter closely and gave an official opinion. The diversion of this money, he said, was "without authority of law." All such disbursements must be authorized by specific appropriation from Congress, he averred. Incidentally, the Controller General's statement disclosed that, instead of $20,000, the amount so spent by December, 1937, was $37,000—nearly as much as the Home Loan Bank Board had promised for two years. (All this took place while Congress was debating the abolition of the Controller General's office.)

Later the Group Hospital Association came into conflict with the District of Columbia hospitals which refused to permit the use of their facilities for operations by the G.H.A. doctors

because they disputed the legality of the organization. The Washington Medical Society also opposed the plan. At that time the G.H.A. boasted some 5,000 members in 19 government agencies. Another organization, the Committee for Cooperative Medical Service, had flung its banner to the wind.

LEWIS' SPEECH CITED

In the meantime, other events indicated that the Administration is irrevocably committed to a program leading to socialization of medicine. Most significant in its implication was a speech delivered by Senator Lewis of Illinois before the 1937 convention of the American Medical Association. The Senator made it perfectly clear that he was the personal emissary of President Roosevelt and that he was there for a serious purpose. Among other things he told the doctors:

The question for you doctors is not whether you like it (the proposed new status of the profession) or whether you don't . . . All your past has been that of the doctor and his patient and that won't do. We know nothing about a patient, don't recognize his existence; it is your creation.

In another direction—through its relief agencies—the Government has taken the country a long way along the road that leads to state medicine as practiced in Germany, Russia and other European nations. Medical care administered through the T.E.R.A. in New York state alone cost $2,487,000 in 1936. W.P.A. health service in the Empire State was reported to have increased by 35 per cent last year.

NATIONAL HEALTH SURVEY

To assemble facts which would justify going the whole route with the original plan, the U. S. Public Health Service embarked in 1935 on a National Health Survey. The W.P.A. cooperated to the extent of $4,000,000 in a house-to-house canvass of some 800,000 families in 19 states—an enormous job. The findings published recently in four preliminary reports seemingly are advanced as proof that the medical profession is not rendering a satisfactory service to society. But a calm analysis of them fails to confirm this supposedly urgent need to regiment the doctors.

A REASON FOR RELIEF ILLNESS

Much is made of the disclosure that both frequency and duration of disabling illness are decidedly higher among relief families than among non-relief. Investigators found 234 cases of illness disabling for one week or more per 1,000 persons in families on relief and only 174 among non-relief families with incomes of $1,000 a year or less. The average for all incomes was 172. Duration of illnesses also is longer by 67 per cent among relief families than among non-relief.

Instead of charging all this difference to the low economic status of the relief population, is it not more reasonable to conclude that those who are receiving free medical service through the relief agencies report more illness and stay abed longer by reason of it than those who pay for this service and whose income stops when they do not work? That is precisely the experience of countries that have adopted state medicine for their whole population.

In 1933 it was found in England that those who carried government health insurance lost an average of 12½ days per worker compared with nine days before health insurance was made available.

In Germany, where compulsory health insurance has had a much longer experience, the annual time loss for sickness has increased in 50 years from five days to 28 days. On the other hand, the average for all non-relief classes in the United States, according to the new Public Health survey, is 9.8 days, and for those on relief, 16.3 days.

When it comes to its statistics on treatment by physicians and on hospitalization, the Public Health Service fails even more completely to sustain the claim of negligence by the medical profession in taking care of the indigent. The survey shows that 70 per cent of all cases of illness among relief families were attended by a physician. The proportion among non-relief cases where the income was $1,000 a year or less was 72 per cent, while the percentage for all income classes was 74. Surely no one is justified in reasoning from these facts that doctors are neglecting the poor.

The proportion of disabling cases hospitalized was 26.8 per cent among relief families, 23.9 per cent among non-relief families under $1,000, and 27.1 per cent for all income classes. Relief cases received more hospitalization than the lowest-income non-relief class, and practically the same as the average for all non-relief. Further, the showing on hospital cases per 1,000 persons is even more favorable to the underprivileged: Relief families, 62.8; non-relief under $1,000, 41.5; all incomes, 46.7.

DOCTORS ARE NOT UNANIMOUS

Doctors, like business men and farmers, are divided on the issue of paternalism. A considerable minority favor it, if we are to accept the results of a survey among the profession made by the American Foundation, established by the late Edward W. Bok. A small group actually welcome socialization, while others favor limited control that will preserve the essential conditions of private practice. Many who do not relish it take a defeatist attitude.

Complete socialization of medicine would appear to be inevitable only if doctors surrender to

it. But those who have their heads set on this move possess subtle means of overcoming opposition. Senator Lewis spoke at Atlantic City of doctors treating cases and sending their bills to Uncle Sam. It's the same bait in another guise as that offered to farmers when they are asked to sign crop control contracts with checks to follow. Both are offered a small guaranteed income in return for a surrender of liberty of action. In the case of the doctors an humanitarian appeal is added.

The doctor with a slender, precarious practice is offered a chance to take immediate cash and let opportunity go. One doctor wrote a letter to a New York newspaper. There are, he wrote, 6,000,000 cases of illness in the country at this moment (estimate of the U. S. Public Health-W.P.A. survey) and yet many doctors are idle. That is 40 patients a head for the 150,000 American doctors. Why not abolish wasteful, inefficient private practice and use this healing talent?

Of such reasoning in these days there is no end. Why should farmers suffer from a glutted wheat market when a generation of Chinamen want for bread? Why should we have capitalistic unemployment and distress in the shoe manufacturing industry when, if Secretary Perkins has said rightly, there are so many shoeless millions in the South? If somebody would only make it possible to kill all the fleas on all the dogs in the country, or replace every obsolescent backhouse in the rural regions, willing hands would be put to work, prosperity would bloom overnight, and human aches would dissolve in blissful glory. With these "if only" theorists, to state a problem is to solve it.

There always will be those who compare what we have with what we might have. As long as they aren't taken too seriously they perform a certain service. Forever there will be a great gulf between the two, bridged by a lot of unsubstantial "if's."

Certainly people can be found who want more medical treatment, just as many want more food, more clothing, more jewelry, more travel, more power. Progress toward any ideal is bound to be relative. It is measured, not by the distance ahead to Utopia, but by how far we have traveled from points in the past and what the means are for going farther. Social Security is an almost insupportable burden already. Some economists charge that this pay roll load is first among the causes that dipped the cycle of business again. Now, to add national responsibility for all the ills of the flesh would be to run a chance of tracing the footsteps of Russia.

A. M. A. HOLDS FAST

In the face of these signs of division and weakening among its own ranks, the American Medical Association has answered the regimenters with "no surrender". At the same time the Association has reaffirmed the profession's tradition of caring for the afflicted regardless of economic status. Plans were announced recently to mobolize local and state medical associations with other local agencies to see that no one who needs it lacks medical attention.

The fight of the doctors raises an issue that concerns dentists and veterinarians, and other professions, all of which treasure their client relationship. Likewise a close parallel is visible in the aims of the reformers as they affect medicine and business.

Business, too, considers itself capable of supplying the needs of its customers and deserving of a wide freedom of initiative. It will applaud the effort by the great majority of the followers of Galen, Paré, Harvey, Lister and all who have enriched the science of healing to preserve the free doctor-patient relationship.

"The Doctor" In Permanent Home

The $150,000 reproduction of the Sir Luke Fildes' masterpiece "The Doctor" first shown by the Petrolagar Laboratories at Chicago's Century of Progress Exposition in 1933, was recently presented by its owners to the new Rosenwald Museum of Science and Industry in that city.

Following the two World's Fairs, "The Doctor" Exhibit went on a tour of 50,000 miles and was



"The Doctor"

viewed by over 5,000,000 people in 18 principal cities throughout the country.

Designed to remind the public of the importance of the family physician, it required the full time of the late Chicago sculptor, John Paulding and the noted artist Rudolph Ingerle and a large corps of assistants, and took nearly a year to complete.

In its new location in the Rosenwald Museum it will be seen by millions of visitors annually.

LEGISLATURE DEADLOCKED ON RELIEF PROGRAM; COMMISSION TO PREPARE ANTI-VENEREAL DISEASE LEGISLATION

THE Ninety-Second Ohio General Assembly, which was convened in Third Special Session at Columbus, May 16, for the purpose of financing poor relief for the balance of the year, was deadlocked over the problem as *The Journal* went to press. On June 17 the House of Representatives and Senate each passed a relief program of its own. A compromise program is expected to be agreed upon by conference committees representing the two legislative bodies.

The deadlock centers on two major bills, one providing for a relief administration setup and the other designed to raise funds to be allocated to the counties for relief purposes.

A bill to authorize local subdivisions to issue bonds against outstanding delinquent taxes to raise relief money has the approval of both houses.

The relief administration bill passed by the Senate makes the state auditor responsible for the supervision of local relief expenditures. The House measure creates a state relief director.

The Senate relief financing bill extends the present .65 of one per cent utility excise tax for relief and the amusement, beer, malt and wort taxes for one year, to January 1, 1941. The House bill increases the utility tax to one per cent, and extends this levy and the amusement, beer, malt and wort taxes for five years to January 1, 1945. Local governments would be authorized to borrow up to 90 per cent of anticipated revenues from these tax measures. This "mortgaging the future" policy is in lieu of the enactment of new taxes.

Both relief administration bills leave supervision of relief with local authorities, and the definition of poor relief in each includes "physician's services wherever rendered".

Use of $1,500,000 of next year's sales tax revenues to apply on this year's unemployment relief needs was authorized in a bill enacted by the Legislature June 9. The bill was designed to aid Cleveland and other metropolitan areas where the relief situation is acute.

The Legislature authorized an appropriation of $1,000,000 from the State's general revenue fund to the Welfare Department for new buildings and equipment at the state hospitals for the insane.

It is expected that this appropriation will make it possible for the State to obtain $900,000 in WPA or PWA funds to aid in financing improvements at Cleveland State Hospital estimated at $800,000; Massillon Hospital, $400,000; Longview, Cincinnati, $300,000; Dayton Hospital, $200,000; and Toledo Hospital, $100,000 to $200,000.

Sponsors of the measure contemplate new buildings to accommodate 1,284 insane patients now being housed in private institutions at a cost to the State of more than $1,000,000 per year.

COMMISSION CREATED

Under a resolution introduced by Representative Grover Maxwell of Defiance County, and adopted unanimously by the House of Representatives June 16, a commission will be appointed to study methods of combating the spread of venereal diseases and to prepare legislation for that purpose. The resolution reads as follows:

WHEREAS, The prevention of congenital syphilis and of the spread of venereal disease through marriage is one of the outstanding problems confronting the state of Ohio today; and

WHEREAS, The spread of venereal disease is the prime source of the increase in the population of our welfare institutions at the rate of approximately one hundred inmates per month; and

WHEREAS, Unless this source is checked, the state of Ohio will be confronted with a grave situation in the years that are before us; therefore be it

Resolved, That a commission consisting of three members of the house of representatives, named by the Speaker, the State Director of Health and six other citizens of the State of Ohio, one to be selected by each of the following groups, societies or organizations, namely:

(a) The Ohio State Bar Association,
(b) The Ohio Farm Bureau,
(c) The Ohio State Grange,
(d) The Women's Joint Committee of Ohio,
(e) The Ohio State Federation of Labor,
(f) Ohio State Medical Association,

is hereby established for the purpose of making a study of the prevention of congenital syphilis and of the prevention of the spread of venereal disease through marriage by the requiring of an antenuptial physical examination to determine the presence of a venereal disease before a license to marry is granted by the probate court.

The commission herein created shall make a full report of the results of the study, together with its recommendations, including the draft of such legislation as the commission may deem advisable to correct the evils therein set forth to the governor of the state of Ohio, and to the 92nd General Assembly, if in session, or to the 93rd General Assembly.

RECORD GROUP OF 303 TAKES EXAMINATIONS FOR LICENSES TO PRACTICE MEDICINE IN OHIO; QUESTIONS ASKED

THE semi-annual examinations given by the State Medical Board at Columbus, May 31, June 1, 2 and 3, were taken by 405 persons, of whom 303 sought licenses to practice medicine and surgery. This is the largest class ever to appear before the Board.

Applicants for osteopathic licenses numbered 19. There were 83 applicants for limited practice certificates, including 3 chiropractors, 25 mechano-therapists, 23 chiropodists, 28 masseurs, 2 cosmetic therapists and 1 naprapath.

Of the 303 medical students who were examined, 65 were from the University of Cincinnati College of Medicine; 91, Ohio State University College of Medicine; 61, Western Reserve University School of Medicine; 32, Eclectic Medical College, Cincinnati; 34, out-of-state medical colleges; 3 from Canadian schools, and 17 from foreign schools, of whom 5 were American citizens.

Results of the examinations will be announced at a meeting of the State Medical Board at Columbus, July 18.

Questions asked those who took the medical and surgical examinations were as follows:

ANATOMY

1. Describe the hepatic portal system.
2. Give the blood supply to hand and fingers, and lymph drainage from the little finger.
3. Describe the structure of the mammary gland. Give its relations, blood supply and lymph drainage.
4. Describe the ankle joint.
5. Give the relations and blood supply of the thyroid gland.

PHYSIOLOGY

1. Summarize the causes of and pathological states associated with alterations in blood volume.
2. Name the factors which combine to maintain the normal arterial pressure.
3. Explain with labeled diagrams the clinical value of electro-cardiography.
4. Give the application of the Law of Initial Tension to cardiac compensation and decompensation.
5. Draw and label a diagram showing an experimental set-up for study of nerve block by chemical or mechanical means.
6. Discuss the physiology of diabetic coma.
7. What organs of the body are involved in carbohydrate metabolism?
8. Differentiate the physiology of cord lesions in pernicious anemia and syphilis of the cord.
9. Discuss proprioceptive sensation and methods of determination.
10. Discuss the physiology of the hormone tests for pregnancy.

DIAGNOSIS

1. Differentiate pneumothorax and pus in pleural cavity.
2. Bacterial endocarditis. Give signs and symptoms.
3. Differentiate essential hypertension and chronic glomerular nephritis.
4. Give signs of tabes dorsalis.
5. Name differentiating symptoms in spastic colitis and cancer of sigmoid.
6. Name two primary anemias and blood findings.
7. Give physical signs of the pneumonias.
8. Give signs of brain tumor.
9. Differentiate thyrotoxicosis and paroxysmal tachycardia.
10. From what tissues or organs may tumors arise in left upper (abdominal) quadrant?

CHEMISTRY

1. Distinguish between primary and secondary alcohols.
2. Under what conditions (physiological, pathological or experimental) might the following changes in carbohydrate metabolism be observed:
   (a) hypoglycemia without glycosuria
   (b) hypoglycemia associated with glycosuria.
3. Discuss iodine in the human body as to amount present, dietary requirements, distribution and function. In what chemical form does it exist?
4. Give the procedures used in determination of blood urea. What are the normal values for urea nitrogen of the blood?
5. Chemically, the analysis of gastric content is used to determine what?
   What would you expect to find from a microscopical examination?

MATERIA MEDICA

1. Name three nitrites. Give the dose of each and how administered. Compare physiological action.
2. Sulfamilamide; give uses and precautions to be observed in administering.
3. Compare the effects of atropine, hyoscine and morphine on the brain.
4. What remedies are employed in colitis? Give dose and manner of administration.
5. How would you "digitalize" a patient? What dangers may you encounter?
6. Give antidotes for the following:
   (a morphine (c) phenal
   (b) arsenic (d) silver nitrate
7. Give the therapeutic management of bronchial asthma.
8. Give official name of aspirin, its uses, dose and symptoms of overdose.
9. Name three narcotics with dose of each and indications for use.
10. Name three bacterial vaccines. Give use, dose and how administered.

MATERIA MEDICA
(Eclectic)

1. (a) Give the indications for the use of sulfanilamide. (b) What are the contraindications for continuing its use? (c) Outline plan of dosage of sulfanilamide in a case of scarlet fever.
2. Name one mydriatic, one myotic.
   Give contraindications for use of a mydriatic.
3. Discuss serum treatment of the pneumonias.
4. Discuss the different drugs used in the treatment of pyelitis.
5. Name the preparations of belladonna and their uses. Indications for use of belladonna. Symptoms of belladonna poisoning.
6. Discuss the danger in the prolonged use of silver and its preparations.
7. Give indications for use of (a) hydrastis (b) phytolacca.
8. Give a rule for estimating the dose of any medicine for a child.
9. Mention five drugs any of which may cause a slight eruption.
10. What is serum sickness? What drugs are used in its treatment?

PRACTICE

1. Under what conditions would you advise pulmonary collapse therapy in pulmonary tuberculosis?
2. Discuss the serum treatment of pneumonia, indications for its use and method of administration.
3. Name four causes of ascites and which is more common (a) in childhood (b) in middle life? How would you establish the diagnosis?
4. What are the findings that would indicate that a four months infant is being given excessive fat in the diet? How would you correct the condition?
5. What are the symptoms of scurvy in infancy? Give corrective treatment.
6. Describe an attack of acute rheumatic fever in a child of eight years. Give treatment during the attack and subsequent to recovery.

7. How would you recognize the presence of acute glomercular nephritis? Give treatment of a case.

8. Discuss the anti-syphilis treatment at the time of primary sore, diagnosis having been made by finding by dark field examination and finding the spirochete.

9. Describe a case of dementia praecox. When would you advise institutional care and briefly discuss the treatment.

10. Outline the symptoms of multiple neuritis, giving the more common causes. What mental symptoms occur in that type caused by alcoholic indulgence?

BACTERIOLOGY, PATHOLOGY AND HYGIENE

1. Describe a quick method of differentiating types of the pneumococcus.

2. Name four infectious diseases conveyed to man by insects. Give the specific carrier in each and method of transmission.

3. How would you make a laboratory diagnosis of syphilis in early cases and before the time of a positive Wassermann test?

4. What may be sources of organisms in renal infections and how do they gain entrance to the kidney?

5. What pathologic conditions cause hepatogenous jaundice, and how do they bring it about?

6. Give the pathologic results of a ureteral obstruction.

7. Given a patient showing limitation of motion of right chest, dullness, increased tactile fremitus, bronchial breathing with temperature of 104°; give the probable pathology present and describe it (a) the gross (b) microscopic.

8. List the reasons that would lead you to
   (a) request an autopsy
   (b) demand an autopsy

9. Describe the eruption of the mild type of small-pox common in present times. Give diagnostic features and differentiation from what common diseases particularly.
   Outline procedures in a positive case
   (a) for patient
   (b) for people in contact

10. What diseases are commonly contracted in connection with a public swimming pool, and what sanitary regulations should be employed as preventive measures?

SURGERY

1. Classify open wounds. How would you treat them?

2. Give symptoms and treatment, prophylactic and surgical, of tularemia.

3. Give diagnosis and management of Colles' fracture.

4. Give procedure in selection of donor in blood transfusion.

5. Discuss thoracic empyema and its treatment.

6. Give etiology, symptoms and physical findings in intestional obstruction with prognosis and treatment.

7. Give the differential diagnosis between acute appendicitis and the disease most commonly confused with it in (a) child (b) an elderly man (c) a young married woman.

8. Briefly discuss induced abortion both from its justifiable and criminal aspects.

9. Give the sites of relative frequency in the gastrointestional tract of (a) carcinoma (b) benign tumors (c) tuberculosis.

10. Differentiate ulcers of lower extremities. Give treatment of each.

OBSTETRICS

1. Discuss placenta previa and outline treatment when called after mother is in labor.

2. (a) How would you control post partum hemorrhage? (b) How deliver the after coming head?

3. Eclampsia; etiology, premonitory symptoms and treatment.

4. Give diagnosis and management of a breach presentation. What are the dangers?

5. When would you use chloroform and morphine in labor?

SPECIALTIES

1. What objective and subjective symptoms would a patient exhibit in the secondary stage of syphilis? The primary?

2. What diseases are liable to be followed by mastoiditis and what may further complicate this? How is mastoiditis treated?

3. Give etiology and complete management of acute conjunctivitis.

4. What complications may occur from infected tonsils?

5. Diagnosis and treatment of streptococcic sore throat.

Dr. John Wishard Is Honored Guest at Wayne County Society Banquet

In recognition of his completion of 50 years in the practice of medicine, Dr. John G. Wishard, Wooster, was guest of honor at the annual banquet of the Wayne County Medical Society at Orrville, Friday evening, May 27. Dr. Wishard has been a member of the society since 1910. He has written several books, including "Reminiscences of a Doctor", and "Twenty Years in Persia". Dr. Wishard was the founder of the American Hospital at Teheran, Persia, and was its director for 20 years. A member of the Board of Trustees of Wooster College, Dr. Wishard is a past-president of the Ohio Student Health Association. He is also a past-president of the Wayne County Medical Society and the Sixth Councilor District Society. Speakers at the banquet included Dr. F. C. Ganyard, Wooster; Dr. David H. Smeltzer, and Dr. William M. Skipp, Councilor of the Sixth District, both of Youngstown.

Venereal Disease Control Bill Enacted

The United States Congress late in May passed the LaFollete-Bullwinkle Bill, providing for a study of venereal disease control measures and expansion of the work of the U. S. Public Health Service in that field. The measure authorizes appropriations to finance activity by the Public Health Service in cooperation with the various states, in the amount of $3,000,000 for the fiscal year beginning July 1, 1938; $5,000,000, the next year; $7,000,000, the third year, and such sums annually thereafter as Congress may determine for the purposes of the Act. In order to make the bill effective the appropriations authorized will have to be made available through inclusion in the Deficiency Appropriation Bill.

W.P.A. Rolls Hit New High

Employment on W.P.A. projects in Ohio hit a new high June 8, with a total of 241,542 persons employed on 814 projects, according to an announcement of Ohio W.P.A. headquarters in Columbus.

The previous high mark was in March, 1936, when 187,000 persons were on the W.P.A. payroll. In September, 1937, the all-time low in employment was hit with 81,000 workers employed.

Microscope Stolen

A binocular Bausch & Lomb microscope with mechanical stage bearing Serial No. 218,978 was stolen from the office of Dr. Leslie P. Haefele, Bolivar, several weeks ago. Local police officials should be notified immediately if this instrument is offered for sale.

IN MEMORIAM

John Frederick Beerman, M.D., Phoenix, Arizona; Starling Medical College, Columbus, 1907; aged 59; former member of the Ohio State Medical Association and the American Medical Association; died May 1. Dr. Beerman went to Phoenix two years ago, after having practiced in Toledo for several years. He was a World War Veteran. Surviving are his widow, a daughter and a son.

Perry Rufus Brubaker, M.D., North Baltimore; Medical College of Ohio, Cincinnati, 1899; aged 70; died May 8. Dr. Brubaker retired several years ago, after having practiced in Bucyrus for 20 years. He was a member of the Masonic Order. Two sisters and five brothers survive.

John Q. A. Clowes, M.D., Shelby, Philadelphia University of Medicine and Surgery, 1869; died May 24; aged 93. Dr. Clowes began the practice of medicine in Rome, Ohio, later moving to Shiloh. After practicing in that community for over 25 years, he retired in 1901 and established a residence in Shelby. Two daughters survive.

William Stewart Fulton, M.D., Wheeling, W. Va.; Ohio Medical University, Columbus, 1898; aged 66; member West Virginia State Medical Society; Fellow of the American Medical Association and the American College of Surgeons; died May 30. Founder and head of the Wheeling Clinic, and president of the West Virginia State Medical Society in 1937, Dr. Fulton was well-known throughout that state and Eastern Ohio. During the World War he was a captain in the Medical Corps of the U. S. Army. Dr. Fulton was a member of the Masonic Order and the Elks' Lodge. Surviving are his widow, one daughter and four sisters.

Edwardina M. Grant, M.D., Cleveland; Cleveland-Pulte Medical College, 1902; aged 74; died June 4. Dr. Grant retired five years ago, after having practiced in Cleveland for over 30 years. Her husband and two daughters survive.

Joseph A. Harper, M.D., Wellston; Columbus Medical College, 1892; aged 79; died May 19. Dr. Harper practiced in Wellston for 42 years. Before beginning the study of medicine, he was a teacher in the Pike County schools. Dr. Harper served two terms on the Wellston city school board. Surviving are his widow, one daughter, four sisters and a brother—Dr. Edward A. Harper, Columbus.

William H. Knauss, M.D., Newark; Starling Medical College, Columbus, 1897; aged 65; member of the Ohio State Medical Association and Fellow of the American Medical Association; died May 5. Dr. Knauss practiced in Newark for 40 years and for the past 30 years had been city health commissioner. He was an active member of the Licking County Medical Society. Dr. Knauss was a charter member of the local Elks' Lodge, and a member of the Masonic Order. During the World War, he served on the draft board. Surviving are his widow, a daughter, a sister and a brother.

Duncan D. McCallum, M.D., New Dalton, Alberta, Canada; University of Toronto Faculty of Medicine, 1896; aged 71; died May 6. Dr. McCallum practiced in Crestline from 1897 to 1912, when he left Ohio, retired from the practice of medicine and began farming in the New Dalton district.

Frederick S. McGee, M.D., Marietta; Starling Medical College, Columbus, 1891; aged 69; member of the Ohio State Medical Association and Fellow of the American Medical Association; died May 18. Dr. McGee began practice in Belpre, where he remained until he located in Marietta 33 years ago. He retired as city health commissioner January 1, 1938, after having served in that capacity for many years. Dr. McGee was a member of the Masonic Order and the Unitarian Church. A son and a daughter survive.

John A. McVean, M.D., Cleveland; Western Reserve University School of Medicine, 1917; aged 59; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Physicians; died May 26. After an early career as a chemist, Dr. McVean began the study of medicine. Following his internship at Cleveland City Hospital, he served as medical superintendent at the hospital for two years, later entering private practice in Lakewood. He also taught pathology at Western Reserve University for several years. Dr. McVean was medical director in Cleveland for the Mutual Life Insurance Company of New York. He was a member of the Catholic Church. His widow, three sons and three daughters survive.

Radford P. Potter, M.D., Toledo; Ohio State University College of Medicine, 1925; aged 44; member of the Ohio State Medical Association and Fellow of the American Medical Association; died May 11. Dr. Potter had been staff physician at Toledo State Hospital for six years.

Prior to that time he was in private practice in Toledo. He was a member of the Masonic Order and the Congregational Church. His widow, a daughter, his mother and two sisters survive.

Charles Morris Simpson, M.D., Cleveland; Beaumont Hospital Medical College, St. Louis, Mo., 1890; aged 79; died June 7. Dr. Simpson practiced for a short time in St. Louis and in Iowa before opening an office on the West Side of Cleveland 47 years ago. A daughter, a son, and a sister survive.

William M. Smith, M.D., Van Wert; Ohio Medical College, Columbus, 1897; aged 81; died May 14. Dr. Smith practiced medicine for a few years, and for 35 years was sales representative for a manufacturer of drugs and medicines. He retired five years ago. Dr. Smith was a member of the Methodist Church and the Knights of Pythias. A daughter, a son, two sisters and a brother survive.

Henry Franklin Staples, M.D., Cleveland; Cleveland University of Medicine and Surgery, 1896; aged 68; died May 26. Dr. Staples practiced in Solon for six years, and in 1902 located in Cleveland. He was active in homeopathic organizations, having been president of the Cleveland Homeopathic Medical Society in 1907 and of the Homeopathic Medical Society of Ohio in 1911. Dr. Staples was professor of hygiene and sanitary medicine at the Cleveland Pulte Medical College from 1905 until it closed in 1914. He was a Mason, a member of the Unitarian Church and the Alpha Sigma Phi and Phi Upsilon Rho fraternities. His widow, his father, two brothers and sister survive.

Thomas Lathrop Stedman, M.D., New York; Columbia University College of Physicians and Surgeons, New York, 1877; aged 85; member of the Medical Society of the State of New York and Fellow of the American Medical Association; died May 26. A native of Cincinnati, Dr. Lathrop was the author and editor of several medical publications. He was preparing the thirteenth edition of his "Practical Medical Dictionary" at the time of his death. His widow survives.

Ira A. Tripp, M.D., Cleveland; Medical Faculty of Trinity University, Toronto, Canada, 1895; aged 68; former member of the Ohio State Medical Association and the American Medical Association; died May 31. Dr. Tripp practiced in Cleveland for 40 years. He was a former member of the staff of Lakeside Hospital, and a member of the Masonic Order. Surviving are three sons and a brother.

* * *

Fairchild Bros., and Foster, New York City, announce with deep sorrow the death of Mr. Macomb G. Foster, Wednesday, June 1, 1938.

College of Medicine to Get $200,000 Through Comly Will Settlement

Settlement of a will contest in the estate of the late Mary L. Comly, formerly of Columbus and Washington, D. C., will enrich the Ohio State University College of Medicine to the extent of $205,000.

A gift of $250,000 to the University was contested by heirs, who agreed to the terms of settlement arranged by Attorney General Herbert S. Duffy.

As a result of the compromise, $200,000 will be used by the University to establish the Comly-Coleman fund for medical research and the balance of $5,000 will be available for loans to needy students in the College of Medicine.

Miss Comly's father, the late Dr. J. M. Comly, was a Columbus physician. Her brother-in-law, the late Dr. Nathaniel R. Coleman, was a professor in Columbus Medical College and Ohio Medical University. He was the first president of the State Medical Board.

Children's Hospital, Columbus, will receive $8,000 as a result of the settlement.

Vital Statistics to Be Indexed by W.P.A.

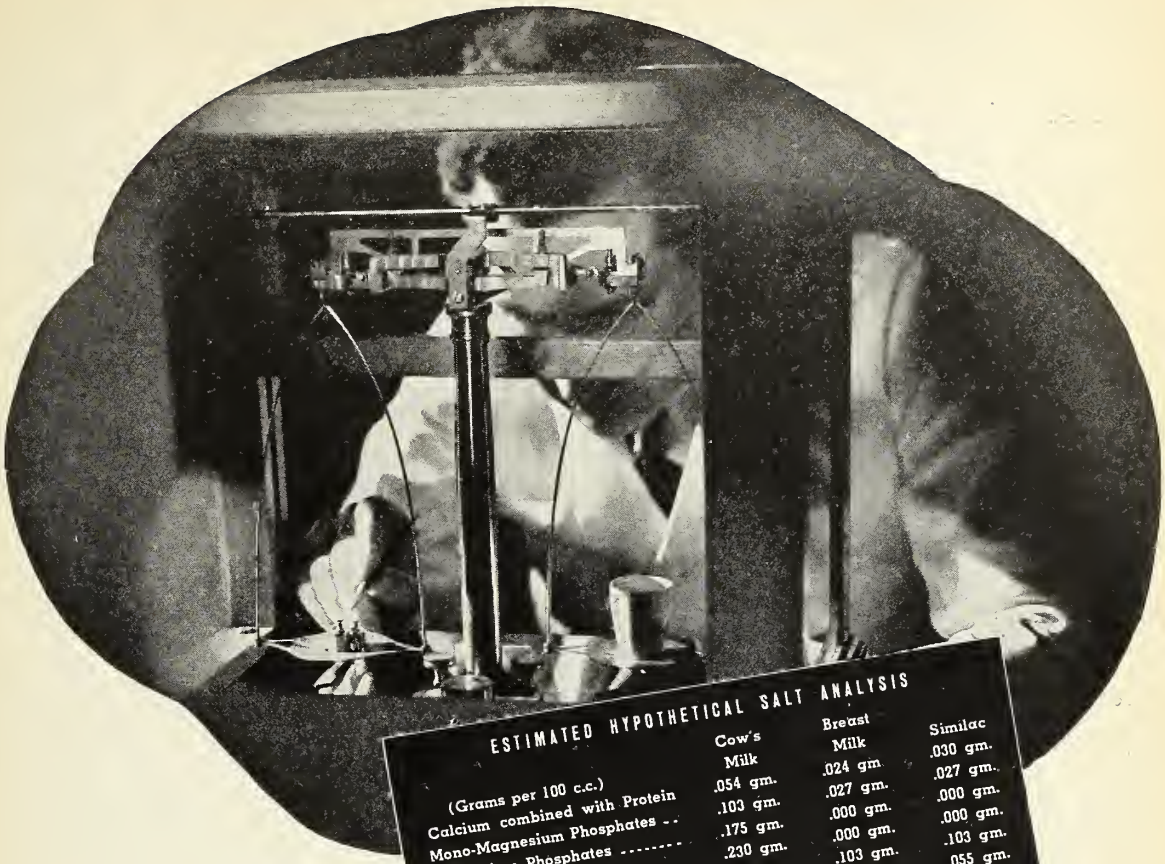
Ohio's vital statistics from 1856 to 1908 will be compiled in modern form by 717 W.P.A. workers throughout the state, according to a recent announcement of Dr. Carl Watson, state W.P.A. administrator. Records of births and deaths over the 52-year period will be transferred from ledgers to an individual index system, at a cost to the Federal Government of $246,757 and $23,680 to the state. Since 1908, all records have been maintained individually in chronological order by county officials. The new records will be under the supervision of the Bureau of Vital Statistics, State Department of Health.

Dr. Lower Honored

Dr. William E. Lower was recently elected to honorary membership in the Academy of Medicine of Cleveland for life. An active and loyal supporter of the Academy for many years, Dr. Lower recently provided the Academy with its first endowment gift—the lecture foundation now known as the William E. Lower Fund. Dr. Lower was president of the Academy in 1909 and president of the Ohio State Medical Association in 1915.

Open New Offices

Among the physicians who have recently opened new offices in Ohio are the following: Dr. G. Howard Woods, Leesburg; Dr. Robert C. Haubrich, Pataskala; Dr. Robin Sharp, Mechanicsburg; Dr. Edwin Swint, Fremont; Dr. Margaret Coy Bryan, Columbus, and Dr. W. E. McKee, Bryan.



ESTIMATED HYPOTHETICAL SALT ANALYSIS

(Grams per 100 c.c.)	Cow's Milk	Breast Milk	Similac
Calcium combined with Protein	.054 gm.	.024 gm.	.030 gm.
Mono-Magnesium Phosphates	.103 gm.	.027 gm.	.027 gm.
Di-Calcium Phosphates	.175 gm.	.000 gm.	.000 gm.
Di-Potassium Phosphates	.230 gm.	.000 gm.	.000 gm.
Potassium Citrates	.052 gm.	.103 gm.	.103 gm.
Sodium Citrates	.222 gm.	.055 gm.	.055 gm.
Calcium Citrates	.119 gm.	.059 gm.	.059 gm.
Iron	Trace	Trace	Trace
Sulphur with Protein	.022 gm.	.001 gm.	.001 gm.
Phosphorus with Protein	.022 gm	.001 gm.	.001 gm.

C. W. Martin, M. D., New York State Journal of Medicine, September 1, 1932

Consider the SALTS

Laboratory methods of modifying cow's milk, as used in the preparation of Similac, make it possible to rearrange the salts so as to closely approximate the salt balance of breast milk. Similac has a salt balance that cannot be obtained in the usual milk dilutions or modifications as made in the home.

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THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

New and Nonofficial Remedies, 1938. Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1938. Cloth. Price, $1.50. Pp. 592, LXVI. Chicago: American Medical Association, 1938.

In this book the Council on Pharmacy and Chemistry lists and describes the medicinal preparations that it has found acceptable for general use by the medical profession.

New substances described in this volume are Sulfanilamide and Protamine Zinc Insulin, with the accepted brands. The proved value of these new additions to the physician's armamentarium bids fair to make the past year a milestone in therapeutic progress. The Council is to be congratulated on the promptness with which it evaluated these drugs and established standards for their adequate control. From the first the Council warned against using Sulfanilamide in untried combinations. The sad tragedy of the deaths from the rashly introduced Elixir of Sulfanilamide-Massengill starkly emphasizes the value of such a body as the Council to the medical profession and the pharmaceutical manufacturers as well as to the public. Of course this potential value cannot become effective as long as those concerned refuse to follow the Council in the use of new remedies.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1937, with the Comments That Have Appeared in *The Journal.* Cloth. Price, $1.00. Pp. 201. Chicago: American Medical Association.

This book is a great deal more than a mere record of the negative actions of the Council on Pharmacy and Chemistry. It gives in full the reasons for the Council's rejection of various preparations, but it also records results of the Council's investigations of new medicinal agents not yet out of the experimental stage, and frequently contains reports on general questions concerned with the advance of rational drug therapy. All three categories of reports are represented in the present volume.

Oculo Refractive Procedure, Analysis and Treatment. By Thomas G. Atkinson, M.D. $3.00. The Professional Press, Inc., Chicago, Illinois, 1937; pp. 160.

The author has written a carefully planned text which is clearly a reflection of his thoughts on the subject. The book is one deserving careful study and thought, and has its place in the ophthalmologist's library. The vocabulary used may be a little difficult for one not conversant with the subject.

The student would doubtless have appreciated a more comprehensive discussion of the use of the cross-cylinders. The last few pages devoted to ophthalmoscopy could well have been omitted. —Claude S. Perry, M.D.

Physiological Chemistry of the Bile. By Harry Sobotka; Chemist to the Mount Sinai Hospital, New York. $3.00. The Williams and Wilkins Company, Baltimore, Md., 1937; pp. 202.

This is a book that should be readily available to every internist, every worker in physiology, pharmacology, and experimental medicine. The author has compiled, in delightful array, a host of facts concerning the bile.

He starts the volume with the nature and quantity of bile secretion. Next, he discusses the composition of bile and modifications of its flow induced by organic and inorganic compounds. One whole chapter is concerned with the occurrence of bile acids outside the biliary tract. The eighth chapter is especially interesting to the internist. In this part he describes the effects of bile acids on various things, such as enzymes, microorganisms, white blood corpuscles, metabolism, and human physiology.

For those workers who are trying to light up the dark corner of the liver-spleen group of diseases, a text of this kind will be a valuable addition to their working library.—A. A. Hall, M.D.

Essentials of Psychiatry. By George W. Henry, M.D., associate professor of psychiatry, Cornell University; attending psychiatrist, the New York Hospital. Third edition, $5.00. The Williams and Wilkins Company, Baltimore, 1938; pp. 465.

The emphasis is placed upon the study of all manifestations of disease and that part relating to the mind has been set forth in rather simple language, and what is more important, in an interesting fashion.

Middle Age Is What You Make It. By Boris Sokoloff, M.D. $1.75. The Greystone Press, New York, 1938; pp. 204.

A good book, full of sound information by a noted physiologist dedicated to the general practitioner, the friend of the middle-aged. The physician will find it useful in helping the middle-aged man to learn about himself and what is better, to find out what to do about it all.

Edward Reinert

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Intern Assignments of 1938 Graduates of O. S. U. College of Medicine

Intern assignments of the 91 June, 1938, graduates of the Ohio State University College of Medicine are as follows:

Walter H. Angerman, Mercy Hospital, Canton; William R. Arrowsmith, Strong Memorial Hospital, Rochester, N. Y.; Charles W. Barch, White Cross Hospital, Columbus; William C. Beck, Lucas County Hospital, Toledo; Isadore I. Binzer, Lucas County Hospital, Toledo; A. Vincent Black, St. Elizabeth Hospital, Dayton; George H. Bonnell, Jr., St. Francis Hospital, Columbus; Charles G. Brown, Maryland General Hospital, Baltimore, Md.; Lee H. Brown, Good Samaritan Hospital, Cincinnati; Robert R. Brown, Henry Ford Hospital, Detroit, Mich.

James M. Byers, Jr., Indianapolis Methodist Hospital, Indianapolis, Ind.; Herbert R. Cammerer, Miami Valley Hospital, Dayton; Austin A. Coulson, Jr., University Hospital, Columbus; Charles L. Critchfield, St. Francis Hospital, Columbus; Thomas R. Curran, Mt. Carmel Hospital, Columbus; Sol A. Danchik, St. Joseph's, Hospital, Fort Wayne, Indiana.

John W. Doering, Mt. Carmel Hospital, Columbus; John A. Dole, St. Francis Hospital, Columbus; Thomas M. Edwards, Christ Hospital, Cincinnati; Doyt E. Farling, St. Joseph's Hospital, Fort Wayne, Ind.; Robert C. Fox, Flower Hospital, Toledo; Robert L. Frazier, St. Francis Hospital, Columbus.

Mark A. Fre dman, Montefiore Hospital, Pittsburgh, Pa.; Carl F. Goll, St. John's Hospital, Pittsburgh, Pa.; John E. Grimm, St. Vincent's Hospital, Los Angeles, Calif.; Paul E. Grimm, White Cross Hospital, Columbus; George A. Hampton, Ohio Valley General Hospital, Wheeling, W. Va.; Casper G. Harner, Springfield City Hospital, Springfield; George E. Henderson, Medical Center, University of Pittsburgh, Pittsburgh, Pa.

Guilford B. Hoiston, Provident Hospital, Chicago, Ill.; George G. Hughes, White Cross Hospital, Columbus; Forest C. Hunter, Meadowbrook Hospital, Hempstead, L. I., N. Y.; Howard M. Hunter, Miami Valley Hospital, Dayton; Robert M. Inglis, St. Luke's Hospital, Cleveland; Herbert M. Jacobs, Jewish Hospital, Brooklyn, N. Y.; Robert B. Jacobs, Miami Valley Hospital, Dayton; George W. Jacoby, Jr., St. Luke's Hospital, Cleveland.

Edward C. Jenkins, Marine Hospital, Baltimore, Md.; Albert M. Johnston, Methodist Hospital, Indianapolis, Ind.; Joseph M. Kaplan, St. Luke's Hospital, Cleveland; Harry L. Katz, City Hospital, Cleveland; Herbert F. Kesinger, Cincinnati General Hospital, Cincinnati; Sol Klatman, Mercy Hospital, Canton; Harlan G. Knierim, Kinsman Hall, Ohio State University Columbus; B. Robert Koogler, Charity Hospital, New Orleans, La.

John A. Kramer, Grant Hospital, Columbus; Walter E. Kramer, Springfield City Hospital, Springfield; William H. Lane, Methodist Hospital, Indianapolis, Ind.; Henry T. Lapp, White Cross Hospital, Columbus; Henry P. Limbacher, St. Luke's Hospital, Cleveland; Frank T. Linz, Tampa Municipal Hospital, Tampa, Fla.; Duane D. Love, Lucas County Hospital, Toledo; Walter E. Martin, Christ Hospital, Cincinnati; Robert S. McCleery, Jackson Memorial Hospital, Miami, Fla.; Jack W. Miles, Mt. Carmel Hospital, Columbus; Richard R. Miller, Columbus Hospital, Seattle, Wash.; Harvey H. Murphy, Springfield City Hospital, Springfield; Clyde W. Muter, City Hospital, New York City; Walter M. Ozawa, St. Francis Hospital, Columbus.

Clarence G. Paisley, People's Hospital, Akron; Rudolph W. Pedigo, practice at Athens; George F. Peggs, St. Mary's Hospital, Detroit, Mich.; Earl E. Pinnell, Cleveland City Hospital, Cleveland; Howard F. Polley, St. Luke's Hospital, Chicago; Thomas K. Preston, Springfield City Hospital, Springfield; John A. Prior, Grant Hospital, Columbus; Joseph A. Ridgeway, Grant Hospital, Columbus; James E. Rose, Grant Hospital Columbus; Robert S. Rosner, St. Elizabeth Hospital, Dayton; Raymond Schroeder, St. Francis Hospital, Columbus; William A. Schroer, St. Elizabeth Hospital, Dayton; Howard Seitz, King's County Hospital, Brooklyn, N. Y.; William Shapero, St. John's Hospital, Cleveland; Jack M. Sharp, Christ Hospital, Cincinnati; Juliet Stanton, (undecided); Gwyn H. Start, Lucas County Hospital, Toledo.

Alvin J. Swingle, Mt. Carmel Hospital, Columbus; John H. Thomas, Youngstown City Hospital, Youngstown; Myrtle M. Thomas, Medical Center, Jersey City, N. J.; Karl S. Uliceny, Lucas County Hospital, Toledo; Walter J. Urbanski, St. Alexis Hospital, Cleveland; Richard E. Vance, Buffalo City Hospital, Buffalo, N. Y.; Samuel L. Vinci, Huron Road Hospital, Cleveland; Paul H. Weaver, Swedish Hospital, Minneapolis, Minn.; Hall S. Wiedner, University Hospital, Columbus.

David A. Wilson, Franklin County Sanatorium, Columbus; Elizabeth I. Workman, Gallinger Municipal Hospital, Washington, D. C.; Harvey D. Wright, St. Francis Hospital, Columbus; Jack Yonchar, St. Vincent's Hospital, Los Angeles, Calif.; Harold C. Ziegler, Lucas County Hospital, Toledo; Edward M. Zucker, University of Iowa Hospital, Iowa City, Ia.

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Intern Appointments of W. R. U. Medical Graduates Announced

Announcement has been made of the intern appointments of the 1938 graduating class of Western Reserve University School of Medicine.

Internships at Cleveland hospitals follow:

University Hospitals: Frank Barry, William Schlesinger, David Shallenberger, Paul Schildt, William Markley, Richard Eckstein, Alfred Hill, Robert Shipley, William Wood and Carroll Dundon.

City Hospital: Joseph Corsaro, Arthur Dutton, Edward Votypka, Regis Golubski, John Grady, Simmons Smith, Daniel Carothers, William Jones, Charles McClelland, Patton Moore, Phillip Rossman, Joseph Bolotin, Julien Jones and Francis Silver.

St. Vincent Charity Hospital: Howard Englander, John Fish, George Campbell, Frank Lindsay, William Maryanski, Robert Miller and Peter Meister.

St. Luke's Hospital: Richard Glove, Theodore Takacy and G. Graham Linn.

Mt. Sinai Hospital: Jerome Gans and Leonard Lewin.

Woman's Hospital: Shegeki Hayashi of Holualoa, Hawaii.

St. Alexis' Hospital: John Master and Fred Smith.

Graduates who will intern at hospitals outside of Cleveland are:

William Falor, Akron City Hospital; Clarence Schmitt, Canton Aultman Hospital; Ned Bauhof, Canton Mercy Hospital; Miss Norma Furtos, Cincinnati General Hospital; Carr Dix and David Leach, Columbus White Cross Hospital; Waldemar Agricola and Paul Oakes, St. Elizabeth's Hospital, Youngstown; Myron Owen, City Hospital, Youngstown; Miss Mollie Cholfin, Children's Hospital, San Francisco; John Carter, Methodist Episcopal Hospital, Indiana, Ind.; Edward Dyer, Ball Memorial Hospital, Muncie, Ind.

David Williams, Mountainside Hospital, Montclair, N. J.; Henry Large, Lennox Hill Hospital, New York City; Miss Wilda Sarver, New York Infirmary for Women and Children; Donald Morgan and Douglas Stanton, Detroit Receiving Hospital; Paul Halter and Alexander Pasterak, Harper Hospital, Detroit; Richard Jackson, Fitzgerald Mercy Hospital, Darby, Pa.; Andrew Roskos, General Hospital, Alleghany, Pa.; Robert Horton, Germantown Hospital, Philadelphia, and Robert Richards, Martha Jefferson Hospital, Charlottesville, Va.

Albert J. Gilbert, a member of the graduating class, has accepted an appointment as instructor in pharmacy at the University of Texas.

Bill Backed by Osteopaths Passed

Osteopaths are permitted to treat Federal employees coming within the provisions of the United States Employees' Compensation Act under a bill recently passed by The Congress. Introduced in the House of Representatives by Congressman Drew of Pennsylvania, an osteopath, the bill was amended by a House committee so that any osteopathic treatment rendered shall be limited according to the laws of the state in which it is administered. A companion bill, introduced by Senator Burke of Nebraska, was reported favorably by the Committee on Judiciary without a hearing, and subsequently passed by the Senate. According to *The Journal of the American Medical Association*, May 28 issue, pages 1838-39, members of the Senate were misinformed by Senator Burke when he stated on the floor that the bill as amended in the House of Representatives was acceptable to opponents of the proposal.

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Lodi—Dr. Clyde L. Cummer, Cleveland, former president of the Ohio State Medical Association, was the principal speaker at the recent dedication of the new annex to Lodi Hospital. Dr. Harry Streett, Litchfield, president of the board of directors, presided.

BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

V. HEAT PROCESSING THE SEALED CONTAINER

● Previously, we have described how raw food material is sealed in the tin container after proper preparatory treatment. After sealing, the next important step in commercial canning is the heat process, or "process" as it is called in the industry.

Essentially, the processing operation involves exposure of the sealed container to hot or boiling water, or to steam under pressure, for the correct period of time. The purpose of the process is to destroy pathogenic or spoilage organisms which may be present on raw food material; the seal on the can then prevents re-infection of the foods by such organisms. Thus, the sealing and processing operations combine to insure a sound, wholesome canned product.

It is not possible here to review all factors which must be considered in the establishment of an adequate heat process for any specific product. Such factors have been briefly discussed in recent publications (1, 2). It must suffice to state that, in general, commercial processing operations are divided into two general types, depending upon the acidity of the food being canned.

The "acid" foods—including the common fruits and certain vegetables or vegetable products whose pH values fall below 4.5—are quite easily heat processed. With such foods it is only necessary to heat the sealed container long enough to permit the attainment of a definite temperature in the center of the can (usually 200°F. or slightly less). In fact, some acid products may be processed by filling sufficiently hot, sealing and inverting the cans, and cooling without further process.

The "non-acid" foods—such as meat, sea foods, milk and most of the common vegetables—require temperatures above that of boiling water for adequate heat processing. Such foods are processed under steam pressure in a closed "retort", usually at a temperature of 240°F. Years of research have made possible the issuance for the guidance of modern canners of a bulletin listing recommended process schedules for the non-acid products (3).

Regardless of the temperature of processing, equipment is available which permits use of the batch or "still" process, and the "continuous" or "agitating" types of process for sealed cans. Improvements in processing machinery and accessory instruments during the past two decades permit precise, scientific control of commercial processing operations.

Above all, however, the modern canner has a clear understanding of the underlying purpose of the process and a deep appreciation of the necessity for strict supervision of the processing operation. Commercially canned foods, consequently, must be ranked today among the most wholesome foods coming to the American table.

AMERICAN CAN COMPANY

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(1) 1938 Food Research 3, 13. (2) 1937. J. Amer. Med. Assn. 109, 1046. (3) 1937. Natl. Canners Assn. Bull. 26L, 3rd ed.

This is the thirty-eighth in a series of monthly articles, which summarize, for your convenience, the conclusions about canned foods reached by authorities is nutritional research. We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

University of Cincinnati Medical Alumni Hold Reunion June 2

The annual Alumni Day Reunion of the Medical College Alumni of the University of Cincinnati held at Cincinnati, Thursday, June 2, was dedicated to Dr. Albert H. Freiberg, professor of orthopedic surgery, and a former president of the Ohio State Medical Association.

At the morning session, the following addresses were made in the surgical amphitheatre of Cincinnati General Hospital: "The Cost of Temporizing in Acute Appendicitis", by Dr. Mont R. Reid, Christian R. Holmes, professor of surgery; "Gastric Hemorrhage", by Dr. Leon Schiff, assistant professor of medicine, and Dr. Max Zinninger, associate professor of surgery and assistant dean of the College of Medicine; "Treatment of Diabetic Coma in Cincinnati General Hospital", by Dr. Louis B. Owens, instructor in medicine, and "Endocrinology in Childhood", by Dr. A. Graeme Mitchell, B. K. Rachford professor of pediatrics.

Dr. Robert C. Rothenberg, president of the Alumni Association, presided at the Alumni Banquet held in the Hall of Mirrors of the Netherland Plaza Hotel. Members of the graduating class were introduced by Dr. Friedlander, dean of the University of Cincinnati College of Medicine, and inducted into membership in the Alumni Association. The principal address was made by Dr. Warren F. Draper, assistant surgeon general of the United States Public Health Service. His topic was "Highlights of the Year in the Field of Public Health".

The program was arranged by Dr. Rothenberg Dr. Robert H. Kotte, vice president; Dr. Richard D. Bryant, secretary and treasurer; Dr. Carl A. Wilzbach, chairman of the committee on arrangements, and Dr. Louis G. Herrmann, chairman of the clinics committee.

O. S. U. Alumni College Speakers

A panel discussion on "Social and Economic Trends in Medicine Today" was presented by Dr. Leslie L. Bigelow, Dr. John W. Wilce. and Dr. A. Henry Dunn, Columbus, as part of the program of the Alumni College held during Commencement Week at Ohio State University. Included among the addresses on professional subjects presented during the College was one by Dr. Jonathan Forman, Columbus, on "Recent Advances in Allergy".

Take Postgraduate Course

Ohio physicians who attended the postgraduate course in otorhinolaryngology recently given at the University of Cincinnati College of Medicine included: Dr. John Adrian, Lorain; Dr. Leo D. Covert, Bellaire; Dr. Lawrence C. Meredith, Elyria; Dr. Justin M. Waugh, Cleveland, and Dr. Walton H. Williams, Middletown.

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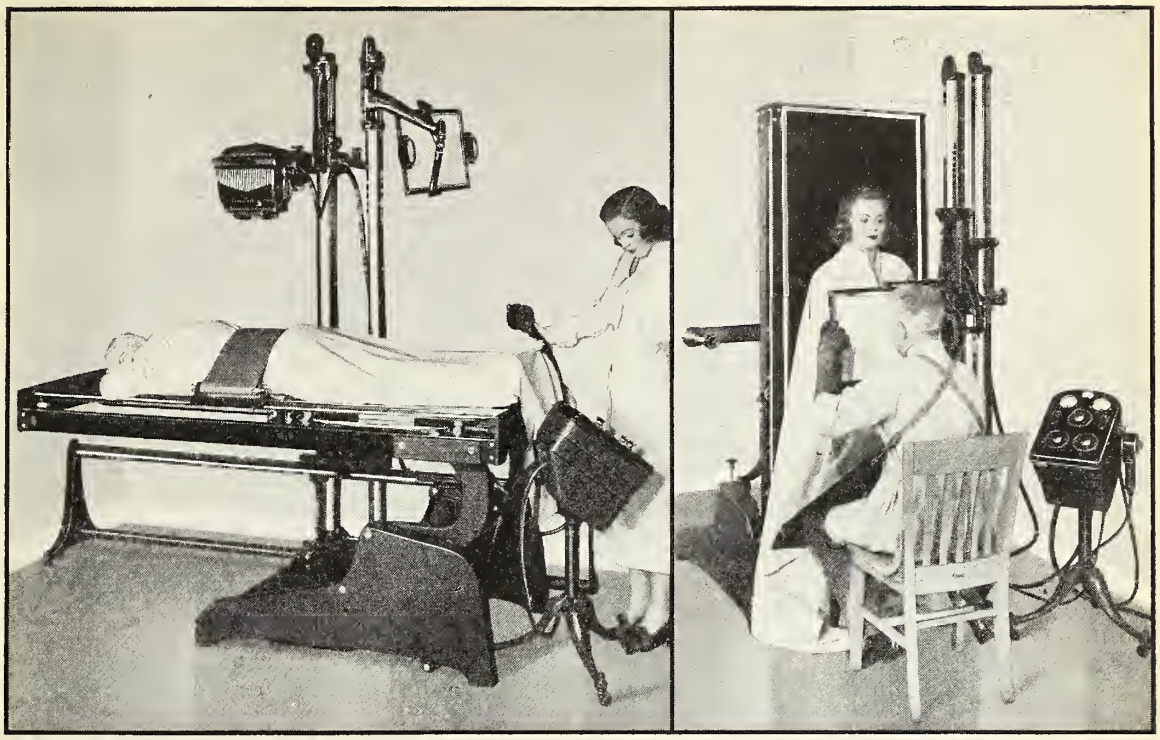
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NEWS NOTES

Berea—Dr. L. G. Knowlton was seriously injured in an automobile accident near here recently.

Bluffton—Dr. G. E. Miller, Allen County Health Commissioner, spoke on "Health Problems as They Affect School Children", at a recent meeting of the P.T.A.

Brookville—At a recent meeting of the local Rotary Club, Dr. C. W. Thomas spoke on "International Cooperation in the Control of Narcotics".

Cincinnati—The medical books of the late Dr. Willard D. Haines were bequeathed to the library of Good Samaritan Hospital.

Chillicothe—Speaking on the topic "Visions and Revisions of Medicine", Dr. L. E. Hoyt condemned socialized medicine as good neither for the patient nor the physician at a recent meeting of the Sunset Club.

Cleveland—Dr. Arthur J. Pearse is the new health commissioner of Cuyahoga County.

Columbus—Dr. Frank J. Lacksen, formerly of Quaker City, has opened an office in Columbus, specializing in dermatology and syphilology. After completing a year's residency in dermatology and syphilology at Bellevue Hospital, New York City, Dr. Lacksen was associated with Dr. Howard Fox in New York for a year.

Dayton—Dr. E. M. Huston, former president of the Ohio State Medical Association, discussed "Medical Ethics" at a recent meeting of Sigma Delta Pi, premedical honorary society of the University of Dayton.

Findlay—Dr. and Mrs. Walter F. Galbreath sailed for Europe May 28. Dr. Galbreath plans to study in Vienna for two months.

Gallipolis—Dr. Charles E. Holzer opened the gates at the recent dedication of the Eureka Dam, which spans the Ohio River several miles south of there.

Middletown—New staff officers of Middletown hospital are Dr. W. A. Whitman, president; Dr. L. H. Skimming, vice president, and Dr. Marvin Decker, secretary-treasurer.

McGuffey—Dr. Joseph B. K. Evans has just completed his 50th year in the practice of medicine.

Springfield—Dr. D. W. Hogue, Councilor for the Second District of the Ohio State Medical Association, is making a study of medical practice in Great Britain.

Stoutsville—Dr. G. P. Huddle, oldest practicing physician in Fairfield County, has been located in this community for 50 years.

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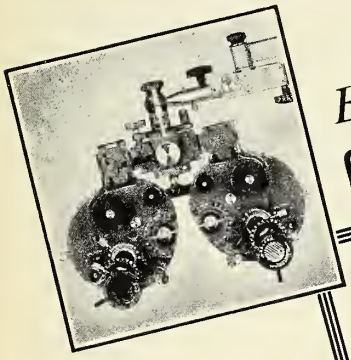
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ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

A meeting of the Adams County Medical Society was held at the Court House, West Union, Wednesday, June 15. The morning program consisted of a business session, followed with a talk by Dr. J. G. Inman, Manchester, on "Tonsillectomy", with discussion by Dr. R. L. Lawwill, Seaman. In the afternoon, Dr. Dewey H. Reps, Cincinnati, spoke on "Appendicitis". His paper was discussed by Dr. R. C. Wenrick, Winchester. The new councilor for the First District, Dr. L. Howard Schriver, Cincinnati, gave an address on some of the problems confronting the medical profession.—O. T. Sproull, M.D., secretary.

CLERMONT

At a meeting of the Clermont County Medical Society, Wednesday evening, June 22, at the residence of Dr. J. M. Coleman, Loveland, an address, entitled, "The Doctor as the Lawyer Sees Him", was made by Dean Stanley, attorney-at-law, Lebanon.—J. M. Coleman, M.D., secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

MONTGOMERY

The Annual Meeting of the Montgomery County Medical Society was held at the Miami Valley Golf Club, Dayton, Friday evening, June 3. S. S. Markham, attorney-at-law, spoke on "The Doctor and the Law". A golf tournament was held in the afternoon.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

AUGLAIZE

The Auglaize County Medical Society had a good attendance at its meeting at Wapakoneta, Thursday evening, May 26, and enjoyed thoroughly the presentation of the motion picture, "Syphilis", shown by Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health. Dr. F. G. Maurer, Lima, a guest, led the discussion which followed, giving special consideration to cardio-vascular syphilis.—Chas. C. Berlin, M.D., secretary.

SENECA

Dr. Martin W. Diethelm, Toledo, spoke on "Episiotomy, Technique of Repair", at a dinner meeting of the Seneca County Medical Society, Wednesday, June 8, at the Fostoria Country Club. The meeting was preceded by a golf tournament.—Edmund F. Ley, M,D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

LUCAS

Under the auspices of the Academy's Committee on Indigent Care, Dr. R. E. Holmes, Toronto, Ontario, spoke on the "Essex County Plan", at a meeting of the Toledo Academy of Medicine, Friday evening, June 4, at the Academy Building, Toledo.—Bulletin.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

New officers of the Cleveland Academy of Medicine are: Dr. H. C. King, President; Dr. Charles T. Way, vice-president; and Dr. E. F. Kieger, secretary-treasurer. Re-elected to the Board of Directors for three year terms were Dr. C. H. Heyman and Dr. King. Three new members of the Board, elected for three years, were Dr. J. E. Rauschkolb, Dr. John Tucker and Dr. E. P. McNamee. Dr. Farrell Gallagher, who was appointed by the Board of Directors last year to fill the vacancy caused by the resignation of Dr. A. G. Cranch, was chosen by the membership to complete the two remaining years of that unexpired term.—Bulletin.

LORAIN

Dr. George Crile, Cleveland, gave an address on "The Surgical Treatment of Essential Hypertension", at a meeting of the Lorain County



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ADDRESS _____

CITY _____ STATE _____

O H.I.

Medical Society, Tuesday evening, June 14, at the Elks' Restaurant, Elyria.—L. H. Trufant, M.D., secretary.

Sixth District

(COUNCILOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

ASHLAND

The regular meeting of the Ashland County Medical Society was held in Loudonville, Friday evening, June 17, in honor of Dr. J. M. Heyde, who is retiring from active practice. Wives of the members were guests at the dinner, which was served in the Lutheran Church. Dr. M. Paul Motto, Cleveland, was the speaker. Dr. Wm. M. Skipp, Youngstown, Councilor for the Sixth District, attended the meeting.—M. D. Shilling, M.D., secretary.

MAHONING

The Annual Interns' Contest of the Mahoning County Medical Society, was held Tuesday evening, June 21, at the Youngstown Club. Speakers were: Dr. Harold J. Reese and Dr. George L. Ambrecht, representing St. Elizabeth's Hospital, and Dr. D. A. Miller and Dr. D. Thomas, representing the Youngstown Hospital Association.

Coming events are: Golf meet, Tuesday, July 28, at the Southern Hills Country Club; annual picnic, Thursday, September 1, at Milliken's Farm, and a dinner-dance, October 22.—Bulletin.

PORTAGE

A meeting of the Portage County Medical Society, Thursday evening, June 2, at the home of Dr. George J. Waggoner, Ravenna, was devoted entirely to a discussion of business matters, including the A.M.A. Survey of Medical Care.—E. J. Widdecombe, M.D., secretary.

STARK

The annual picnic of the Stark County Medical Society was held at the Congress Lake Country Club, Canton, Wednesday, June 22. The program consisted of golf and bridge in the afternoon; dinner in the evening, followed by a concert by the Akron Doctors' Symphony Orchestra, directed by Dr. A. S. McCormick.—Clair B. King, M.D., secretary.

SUMMIT

Dr. R. A. Ramsey, Columbus, spoke on "Medical Aspects of Thyrotoxicosis", at a meeting of the Summit County Medical Society, Tuesday evening, June 7, at the Mayflower Hotel, Akron. The motion picture, "Syphilis", was exhibited by Dr. W. P. Johnson, Columbus, chief, Bureau of Venereal Diseases, State Department of Health, at a meeting of the society, June 21.—Bulletin.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

GALLIA

Members of the Gallia County Medical Society were hosts to physicians of surrounding counties,



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Friday evening, June 3, at Holzer Hospital, Gallipolis, when the State Department of Health presented a refresher course in pediatrics. The speaker was Dr. Elmer G. Horton, professor of pediatrics, Ohio State University College of Medicine.—Milo Wilson, M.D., secretary.

LAWRENCE

Twenty-five physicians from Lawrence and Scioto counties attended a refresher course in pediatrics, presented by the State Department of Health, at the Lawrence County General Hospital, Ironton, Thursday, June 2. Dr. Elmer G. Horton, Columbus, professor of pediatrics, Ohio State University College of Medicine, was the clinician and lecturer. A clinic was held in the morning, followed by luncheon at the Hotel Marting. I. C. Plummer, Columbus, chief, Division of Vital Statistics, State Department of Health, spoke at the afternoon session. The meeting was also attended by Dr. A. W. Thomas, chief, and Dr. Geneva Shong Rothemund, pediatrician, Bureau of Child Hygiene, State Department of Health.—Wm. A. French, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

CRAWFORD

Dr. George T. Harding, Columbus, spoke on "Strokes and Resulting Changes in Senility", at a meeting of the Crawford County Medical Society, Monday evening, June 6, at the Elks' Home, Bucyrus.—O. R. Kackley, M.D., secretary.

FRANKLIN

The following programs were presented by the Columbus Academy of Medicine during June:

June 2—Postgraduate Day. Speakers: Dr. Walter Alvarez, Rochester, Minn.; Dr. Roy D. McClure, Detroit, Michigan; and Dr. Charles E. Galloway, Chicago, Ill.

June 20—Symposium on Birth Injuries. "The Legal Aspects of Birth Injuries", Curtis Reed, attorney-at-law; "Cause of Birth Injuries From an Obstetrical Standpoint", by Dr. Roy E. Krigbaum; "The Early Diagnosis of Birth Injuries", by Dr. John Edwin Brown, Jr., and "The Treatment of Birth Injuries", by Dr. H. E. LeFever.

June 30—Section in General Medicine. Joint Picnic with Columbus Academy of Pharmacy at Perkins Observatory, Ohio Wesleyan University, Delaware.—Bulletin.

MORROW

A dinner meeting of the Morrow County Medical Society was held at the Globe Hotel, Mt. Gilead, Thursday evening, June 16. Dr. Daniel W. Brickley, Marion, read a very interesting paper on "Deafness".—T. Caris, M.D., secretary.

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Vol. 34 AUGUST, 1938 No. 8

BILATERAL NEPRHO- AND URETERO-LITHIASIS

By IRVIN ABELL, M.D., LOUISVILLE, KENTUCKY

THE three generally recognized factors upon which the formation of calculi in the upper urinary tract depend are stasis, infection and a disturbance of the colloid mechanism by which urinary salts are maintained in solution. The importance of the first two has been fully substantiated by ample clinical evidence, but the nature and exact working of the last one is still a matter of conjecture. A number of important and seemingly independent factors may be responsible for disturbing the colloid-crystalloid equilibrium of the urine and initiating the mechanism of stone formation. These factors may exert their influence singly or in combination.

Clinical studies tend to show that no single factor is equally concerned in all cases and that in the majority of cases two or more different factors are involved in any given case. The following etiologic factors are worthy of consideration: (1) dietary or vitamin deficiency; (2) climate; (3) age; (4) race; (5) metabolic perversions; (6) trauma; (7) infections; (8) urostasis; (9) papillary or calyceal ulcerations; (10) disturbance in calcium-phosphorus metabolism and in general body functions. Our present knowledge does not adequately explain the formation of a pure uric acid calculus in one person, a pure oxalic calculus in another and a triple phosphate calculus in yet another. It does not clarify the difference between the person who forms and passes but one stone and the individual who repeats and repeats. It does not elucidate the problem of the patients who, for long periods of time, eliminate phosphates, oxalates and urates in the urine without the formation of stone. Again, the kidneys are bilateral organs and primary stones are unilateral in approximately 75 per cent of all cases, leaving 25 per cent in which they are bilateral. This latter group presents problems peculiar to it, in the solution of which there is not, as yet, unanimity of opinion.

The multiplicity of pathological pictures presented and the varying degrees of renal impairment produced by obstruction, infection and pressure dependent upon the presence of bilateral calculi in the upper urinary tract afford abundant opportunity for the exercise of judgment and the display of technical craftsmanship in their treatment. In a series of 139 patients presenting calculi in the upper urinary tract, 24 or 17.2 per

The Author

● Dr. Abell is a graduate of the University of Louisville School of Medicine, 1897; president of the American Medical Association; member American Surgical Association, Southern Surgical Association, American Urological Association; staff of Louisville City, St. Joseph, Children's Free Hospitals, Louisville; clinical professor of Surgery, University of Louisville School of Medicine.

Read before the Third General Session, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

cent showed a bilateral distribution. Of these nine were females and fifteen were males. The greater percentage was noted in the first half of adult life, six being between 20 and 30, ten between 30 and 40, five between 40 and 50, and three between 50 and 60 years of age. Three patients are classified in the non-operative group. One a female 37 years of age showed stones in both kidneys, the right one hydronephrotic and devoid of function, the left one showing one stone with fair function, a normal blood chemistry and a blood pressure of 242 systolic and 148 diastolic. She had had no colics, pain or hematuria and consulted her physician because of a cough and a palpable mass in the right abdomen. The second, a male 37 years of age presenting multiple small calculi in both kidneys with a history of albuminuria for five years, no hematuria and but one attack of moderate pain in the right abdomen. The third, a male, from whom we had removed a calculus from the left renal pelvis because of colics and hematuria when 26 years old, returned at the age of 30, showing two shadows in the left renal area, one in the right renal area and one in the lower right ureter, all of small size. Intravenous urography confirmed the above locations, revealing the right kidney to have a double pelvis and two ureters, which, joining outside the bladder, entered its wall as one channel. The stones on the right side were located, one in the lower pelvis and one in the lower end of the corresponding ureter. All have been passed following manipulative treatment. The operative group comprised the remaining 21 patients, upon whom a total of 52 operations were done, 46 by us and six elsewhere. The distribution of the calculi was as follows:

Calculi of varying size in both kidneys	5
Calculi in one kidney and in ureter of opposite side	6
Calculi in both kidneys and in one ureter	2
Calculi in both kidneys, one ureter and bladder	1
Branched calculi in both kidneys	4
Branched calculus in one kidney with calculus in opposite ureter	1
Branched calculus in one kidney with smaller stone in opposite kidney	2

The operations done by us consisted of eight pelvio-lithotomies, four pelvio-nephro-lithotomies, fourteen nephro-lithotomies, three nehphrostomies, one vesico-lithotomy, one pelvio-lithotomy with renal decapsulation, seven uretero-lithotomies and eight nephrectomies. In nine patients the operative procedures were limited to one side of the urinary tract while in twelve they involved, at different sittings, both sides; two had multiple operations on one side while three had multiple operations on both sides. There were 16 recoveries and five deaths, representing a mortality for the series of 21 patients of 23.8 per cent and for the series of 46 operations of 10.9 per cent. Four of the deaths followed primary operations, two nephro-lithotomies, two pelvio-lithotomies, while the fifth came after a nephro-lithotomy upon a right pyonephrotic kidney, the patient during the previous eight years having had multiple operations on both sides, including a left nephrectomy.

A review of the histories of these patients furnishes a number of observations which seem to the writer worthy of discussion. Granting the presence of bilateral calculi, opinion as to their operability varies from those who regard bilateral stones as rarely surgical unless an emergency exists, to those who feel that all cases deserve the serious consideration of surgery. The removal of the smaller stones by means of manipulative procedures without resort to open surgery furnishes the most important advance in their management and constitutes the treatment of choice when size and location permit of its application. In the presence of obstruction with active infection if passage of the stone or adequate catheter drainage cannot be secured by manipulative means surgical removal becomes necessary to prevent further renal impairment. In all cases it is wise to determine the excretory value of each kidney in reaching a decision for or against operation and in the event of the latter choice, in determining the site and character of surgical attack.

Renal function, size, number and location of stones, obstruction and infection, age and general physical condition of the patient all enter into the picture and must be evaluated in reaching a decision. Of the two patients in this series upon whom operation was declined, one presented a marked hypertension with the function of one kidney absent and that of the other impaired: the blood chemistry was normal, indicating an excretory value sufficient to prevent retention. Having learned, by disappointing experience, that routine tests to determine kidney function can not always be relied upon to indicate potential renal recovery, it was felt that this patient would live longer and in greater comfort without surgery than with it. The second patient, with good kidney function, presented multiple small calculi in the pelves and calices; there were no disabling colics and no active infection. The difficulty, if not actual impossibility, of removing each and every stone even with radiographic equipment for control observation at operation together with the knowledge that recurrences are frequently due to "left overs" and to continued infection made it appear logical that for this patient surgery had best be reserved for the treatment of complications, when and as, they appear.

In general two rather distinct clinical groups have been noted: one in which the stones in each

kidney have been of equal size and one in which a large stone occupied one kidney with a smaller stone in the kidney or ureter of the opposite side. It may be assumed that the calculi in the first group were of simultaneous origin while in the second, the larger stone antedated the formation of the smaller one and further that the potential renal function is greater in the second than in the first group. When large branched calculi occupy both kidneys and the latter give no evidence of active infection it becomes a moot question as to whether or not such patients will live longer and more comfortably without operation than with it. The inevitable injury to renal tissue in the removal of such stones and the almost invariable recurrence have led many to employ operative treatment only in the presence of complications. The supervention of infection, if limited to one kidney, is an indication for operation on that side; if it involves both kidneys the extent of renal impairment will determine for or against the advisability of operation. When the stones are of smaller size and occupy positions accessible to removal through pyelotomy incisions the only contraindication to operation is the presence of such renal damage as to make the prospect of regeneration a hopeless one. The smaller stones, by virtue of their ability to produce obstruction in the ureters and in the pelves, are potentially more harmful than those situated in the calices and their removal, when feasible, is indicated.

In the second group characterized by a large stone in one kidney and a smaller one on the opposite side, granting the function of the side containing the smaller stone is satisfactory, the latter should be removed. The disposition of the kidney with the large calculus will depend upon function, impairment of renal tissue, quiescence and infection: if pyonephrotic, its removal will be indicated both to prevent recurrence in it and as a protection to the opposite side. "It is to be remembered that the so-called 'silent' stones are silent only in so far as subjective symptoms are concerned; they are never silent in so far as their injurious effects on renal tissue is concerned and usually eventually cause complete destruction of the kidney." It is axiomatic in the operative removal of calculi from both sides of the urinary tract to operate upon but one side at a time and it has been quite generally the custom to operate first on the side showing the best function in order to conserve this property as far as possible before approaching the more badly damaged one. We have made exceptions to this rule in pyonephrosis, giving rise to fever and constitutional disturbance, and in the cases in which the calculus on one side was situated in the ureter or at the ureteropelvic junction. The active pyonephrosis demands immediate attention regardless of the better function on the opposite side and the ureteral and uretero-pelvic stones, because of their greater opportunities for causing acute obstruction and infection, had best be removed first as a precautionary safety measure.

Again, if one kidney is causing severe pain, it should be operated on first regardless of whether or not it is the more damaged of the two, since pain is an indication of active disease in a kidney possessing functional value, the saving of which becomes a prime consideration. In the presence of anuria neither side at the time possesses function; its potential recovery and consequent choice of kidney for operation is indicated by the side upon which the pain occurs. One patient in our series presented this complication; a female of 49 years of age, with a long history of bilateral colics was seen nine days after the last attack, during eight days of which time she had passed no urine. Radiograms showed both kidneys considerably enlarged with shadows in both kidney areas and in that of the upper right ureter. The pain in the last attack had been limited to the right side. The stones were removed from the pelvis of the right kidney through a pyelotomy incision; those in the ureter were displaced upward and removed in like manner. The enlarged kidney was decapsulated and drained by means of a rubber tube anchored in the pyelotomy incision with ensuing recovery. The improvement noted following drainage of the kidney with a large rubber tube, even with the calculi in situ, has led some urologic surgeons to advocate operation upon the bad kidney first, arguing that the recovery of some of its function renders safer the attack upon the better kidney and as well provides the best chance for permanent improvement upon the part of the "bad kidney". The reasons for such a conclusion are given by Cumming, (Jr. Urology, Dec., 1934), as follows:

1. If the "good kidney" has been operated upon, the reserve function on the other side may be insufficient to allow recovery.

2. If the "bad kidney" is sacrificed first, one is confronted with an attack upon a single kidney with no reserve, and the recognized period of a function following operation is often fatal.

3. If one is forced to return to the "bad kidney" and remove it at a later operation, it may have recovered temporarily to a degree that some reserve can be depended upon.

4. If the "good kidney" is operated upon first, one may find a rapid decline in remaining function on the other side, so that when the second operation is undertaken, nephrectomy seems the only logical step. If this type of kidney is allowed to remain, recurrences are high in percentage, and permanent fistulae very common.

It is conceivable that in pursuing such a course "bad kidneys" might be saved, which would, if the reverse plan were followed, in all probability be removed. Personal experience with a single calculous pyonephrotic kidney gives evidence of the capacity of a badly damaged kidney to main-

tain function compatible with life and normal activity. A male, 29 years of age, came under observation with the history of a left nephrectomy eight years before because of hemorrhage following an operation for stone. Within the preceding year he had suffered attacks of colic referable to the remaining kidney with fever of 102 to 104 degrees. Radiogram showed a large right kidney shadow with multiple calculi. At operation, the kidney was found distended and lobulated; a large stone was removed from the pelvis and a number of smaller ones from the calices through a nephrotomy incision in the distended, lower calyx and drainage made with a large rubber tube. Recovery followed and a report, eight years after operation, indicated no recurrence with ability to pursue his usual vocation. Had this patient possessed a good left kidney, the chances are that the right "bad kidney" would have been removed. We have made similar observations upon a patient subjected to consecutive bilateral removal of stones, the P.S.P. test returning to an approximate normal within the two years elapsing between the operation and the subsequent examination. Aside from the removal of the calculi, the two important indications to be met in operations for bilateral stones are the elimination of infection and the removal of obstruction with maintenance of free, unimpeded drainage. Failure of attainment of either leaves a fertile field for further stone formation, recurrences being due to "left overs", infection, inadequate drainage and to those unknown factors which combine to make one a "stone former" or "repeater".

Illustrative of the distressing experience entailed upon both patient and surgeon by recurrence are the two following cases:

Case I. Male, age 34, first seen in February, 1922, with a history of left-sided colics and hematuria. Radiograms showed right kidney clear and a shadow corresponding to pelvic area of left kidney. The right kidney showed a normal function, the left one, none; the urine showed pus, blood and staphyloccoci. At operation, the shortness of the renal pedicle, combined with the perirenal inflammatory thickening, made it impossible to deliver the kidney into the incision, rendering necessary the removal of the stone through a nephrotomy incision. Sinus produced by the drainage tube was slow in healing, closing and opening until May. In April of the same year, a small stone was passed spontaneously. In May, radiogram showed two wheat grain sized shadows in left kidney area. In July, pyuria and hematuria had become marked, accompanied by colics with fever. Radiogram showed five shadows in left renal area with suspicious small shadow in right kidney region. A left nephrectomy was done in August, the surgical specimen report showing nephrolithiasis, pyelonephritis, with obliteration of the cortex with exception of portion near poles, where it was not well differentiated.

February, 1923, patient reported much discomfort in right renal area—radiogram showed branched stone in pelvis with two stones in calices. These were removed through a nephrolithotomy incision. In November, 1924, hematuria with pain, chill and fever appeared and radiogram showed suspicious small shadow in right renal region. In October, 1926, radiogram showed stone in the pelvis and moderate sized stone in lower calyx. In May, 1928, radiogram showed additional shadow in upper calyx. In January, 1929, radiogram showed branched calculus. Through 1929, patient at times was confined to bed because of hematuria, discomfort and fever. In March, 1930, right peri-renal abscess evacuated of eight ounces of pus. September, 1930, partially healed sinus enlarged evacuating pus. October, 1930, stones removed from right kidney through a nephrolithotomy incision. Death followed 17 days later from uraemia. During the eight years this patient was under our care, repeated, unavailing efforts were made to clear up the infection; the urine was kept acid with urotropin and acid sodium phosphate, the pelves received more than 100 irrigations and were repeatedly drained with an indwelling ureteral catheter.

Case II. Male, age 28, came under observation February, 1928, with a history of right renal colics with hematuria dating back to 1920. Radiograms showed a calculus in right kidney pelvis with two suspicious small shadows in the left kidney area. Right kidney stone removed through a pyelotomy incision. In August, left renal colics with hematuria were noted. In April, 1929, calculus recovered from right kidney by Dr. Grant, cystoscopic method. In November, 1930, right kidney stone removed through pyelotomy invision at the Hines Veterans' Hospital. The drainage tract failed to heal and he again came under our care in April, 1931, with free bleeding from the sinus. A number 10 ureteral catheter was anchored in the right kidney through the bladder and the sinus curretted with resultant closure. Returned in June, 1932, with history of diasbling colics referable to left kidney, radiogram showing multiple shadows; five stones removed from middle and lower calices through nephrotomy incision, radiographic control observation showing kidney free of shadow. Convalescence stormy, uraemic with non-protein nitrogen 110 and urea nitrogen 75. Wound failed to unite, requiring resuture. In August, recurring chills, fever and colics referable to left kidney. September, left nephrectomy at Hines Veterans' Hospital. In January, 1933, colics referable to right kidney with spontaneous passage of stones. Returned to Veterans' Hospital, where, during February, two periods of anuria were noted, one of 48 and one of 72 hours' duration. In March, (Veterans' Hospital), stones removed through pyelotomy incision and permanent drainage made with large Pezzer catheter. When last seen, 1938, patient showed rather marked failure of renal function.

The infecting organism in both patients was the staphylococcus. Coccal infections of the kidney are more resistant to treatment and are more likely to spread to the opposite kidney than are infections of other types. Some strains of cocci decompose urea and some do not, while some, met with in acid urines, appear to have the power of forming phosphatic calculi. The urine in these two patients, with the exception

of but few occasions, constantly showed an acid reaction.

In conclusion, it may be stated that in the treatment of bilateral calculi in the upper urinary tract, many of the rules which are followed in the management of unilateral calculi do not apply; each case becomes an individual problem, its management and care to be dictated by the physical, clinical and laboratory findings together with the course the case pursues. Since the calculi are bilateral the fundamental factors entering into their origination are evidently present, bringing to the fore the question of recurrence in determining for or against the employment of open surgery in their treatment. In such instances in which resort is had to operation, certain indications are important in minimizing this distressing complication. Pelviolithotomy is the preferable operative procedure when and where possible, since it occasions the least trauma to renal tissue. Meticulous care should be given to the avoidance of "left overs" in which radiographic visual control is most helpful. Free and unimpeded urinary drainage must be secured, as the combination of stasis and infection furnish an ideal background for re-formation. In the elimination of infection, measures should be directed not only to the urinary tract but as well to distant foci. Finally, as the result of work done in recent years by a number of observers, particularly by C. C. Higgins, we have actual knowledge and factual data upon which to formulate rational diets which are tremendously helpful in minimizing recurrences. A high vitamin A alkaline or acid ash diet should be prescribed following operation, the constituents of which depend upon the hydrogen-ion concentration of the urine and the chemical constituents of the calculus; where the stone has formed in an alkaline urine the high vitamin A acid ash diet shifts the urinary reaction strongly to the acid side, and when it has formed in an acid urine the pH is shifted to the alkaline side by the use of a high vitamin A alkaline ash diet. When intelligently and attentively employed, the correction of vitamin A and dietary deficiencies constitutes one of the most important measures in combating urinary lithiasis.

A List of 12 Common Diseases

Which Extrangenital Syphilis in its Commonest Locations May Resemble

Lip—Infected fever blister, Trauma, Carcinoma, Tuberculosis.

Tonsil—Acute follicular tonsillitis, Chronic tonsillitis, Vincent's angina, Neoplasm.

Finger (suspect doctors, nurses, and dentists) —Infected hangnail, Paronychia, Onychia, Bone felon.

Suspect lesions which fail to heal. Look for satellite bubo.—Supplement No. 5, Venereal Disease Inf., U. S. P. H. S.

Diagnostic Maxims in Primary Syphilis

1. Any genital sore in male or female is possibly primary syphilis until proved to be otherwise.

2. Any indolent lesion anywhere on the body (especially lips, tonsils, fingers) which fails to heal in two weeks may be primary syphilis.

3. The diagnosis of primary syphilis is a laboratory, not a clinical, procedure.

4. Do **not** treat suspected primary syphilis locally until repeated dark fields are negative.

5. Do **not** give antisyphilitic treatment on suspicion; prove the diagnosis.

6. There is reason for urgent haste in diagnosis; hours count!

DIAGNOSE PRIMARY SYPHILIS BY—

1. Dark-field of surface serum; if negative, repeat at least three times on consecutive days before local treatment.

2. If surface dark-field is negative, do dark-field of aspirated serum from lesion's base, **or**

2a. Dark-field of aspirated material from lymph node.

3. If you have no dark-field microscope, send the patient at once to someone who has; or send a capillary tube specimen (see text) to nearest laboratory.

4. Do serologic test at first visit. If any of these tests are positive, treat at once. If all are negative—

5. Do serologic test follow-up for 3 months, weekly for first month, every 2 weeks thereafter.

LESIONS OF BONES AND JOINTS

Involvement of the bones and joints in early syphilis is far more common than is generally supposed. Symptoms are more important than signs. The usual manifestations are:

1. Osteocopic pains, often nocturnal, involving the shafts of all the long bones. Localized tender areas may be present on palpation though no other abnormalities are obvious.

2. Arthralgia. Dull aching and stiffness of the joints, large and small, worse at night or in the morning. There are no objective or X-ray changes.

3. Hydrarthrosis, usually involving the knees and ankles. No X-ray changes.

4. Actual acute periostitis (commonest in the tibia) in which, owing to its acuteness, X-ray changes are at first absent.

There is nothing about the first three of these manifestations to differentiate them from a variety of other conditions, and in fact the mistaken diagnoses of "neuritis," "rheumatism," and "infectious arthritis" (acute, subacute, or chronic) are commonly made.—Supplement No. 5. Venereal Disease Inf., U.S.P.H.S.

The richest soil, if uncultivated, produces the rankest weeds.—Plutarch.

THE SELF-SELECTION OF DIET EXPERIMENT: ITS SIGNIFICANCE FOR FEEDING IN THE HOME

By CLARA M. DAVIS, M.D., Winnetka, Illinois

THE self-selection of diet study (*) reversed the usual practice of telling children what and how much they must eat, and let them show us what and how much they would eat when undirected and uninterfered with. Fifteen children from six to eleven months of age, who had not had foods other than milk, were thus observed for periods varying in individuals from six months to four and one-half years. A large assortment of cooked and raw, uncombined, unseasoned, and unsophisticated foods, consisting of foodstuffs commonly used by older children and adults, was served.

Food List

1. Meats (muscle cuts)
   - Beef
   - Lamb
   - Chicken
2. Glandular Organs
   - Liver
   - Kidney
   - Brains
   - Sweetbreads (thymus)
3. Sea Food
   - Sea fish (haddock)
4. Cereals
   - Whole wheat (unprocessed)
   - Oatmeal (Scotch)
   - Barley (whole grains)
   - Corn meal (yellow)
   - Rye (Ry-Krisp)
5. Bone Products
   - Bone marrow (beef and veal)
   - Bone jelly (soluble bone substance)
6. Eggs
7. Milks
   - Grade A pasteurized milk
   - Grade A pasteurized whole lactic milk
8. Fruits
   - Apples
   - Oranges
   - Bananas
   - Tomatoes
   - Peaches or Pineapple
9. Vegetables
   - Lettuce
   - Cabbage
   - Spinach
   - Cauliflower
   - Peas
   - Beets
   - Carrots
   - Turnips
   - Potatoes
10. Incidentals
    - Sea Salt (Seisal)

Read before the Second General Session, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

(*) Davis, C. M. Self selection of diet by newly weaned infants. Am. J. Dis. Child. 36:651, 1928.

The Author

● Dr. Davis is a graduate of the University of Michigan Medical School, 1904; member Chicago Pediatric Society, Academy of Pediatrics; associate attending physician at Children's Memorial Hospital, Chicago; lecturer on nutrition, Northwestern University Dental School.

Cooking was done, for the most part, in 10W-low-pressure steam cookers without added water to avoid loss of soluble substance. Naturally, all food was finely cut or mashed before serving.

This list was served according to an unvarying schedule at three meals a day and no food given between meals.

7 a. m.
- Milk, grade A
- Milk, lactic
- Sea salt (Seisal)
- Apples, raw
- Apples, cooked
- Orange (juice or pulp)
- Wheat, raw
- Wheat, cooked
- Barley, cooked
- Brains, cooked; Kidneys, cooked — 1
- Sweetbreads, cooked; Liver, cooked — 2

(1 and 2 served on alternate days, never on the same day)

12 m.
- Milk, grade A
- Milk, lactic
- Sea salt (Seisal)
- Ry-Krisp
- Bone marrow, raw
- Bone marrow, cooked
- Beef, raw; Beef, cooked — 1
- Lamb, cooked 2
- Chicken, cooked 3
- Lettuce, raw; Potatoes, cooked; Beets, cooked — 4
- Carrots, raw; Carrots, cooked; Turnips, cooked; Cauliflower, cooked — 5
- Cabbage, raw; Cabbage, cooked; Spinach, cooked; Peas, cooked; Peas, raw — 6
- Cornmeal, cooked

(1 and 2, 1 and 3, 2 and 3, served

on successive days. One group of three vegetables served each day (4, 5 or 6))

5 p. m. Milk, grade A
Milk, lactic
Sea salt (Seisal)
Ry-Krisp
Oats, raw
Oats, cooked
Bone, jelly
Fish
Eggs, raw
Eggs, cooked
Tomatoes
Banana
Orange
Pineapple or peach

Servings were in weighed or measured quantities (each food in a separate dish) and the remains were weighed or measured so that a complete record exists of the amount of each article eaten by every child at each meal. In the dining room each child had his own small table and all the foods for the meal were on his tray when it was set before him. Children ate with spoon or fingers as they could or wished and empty dishes were promptly refilled to insure their having all they wanted of everything. The attendants were trained to refrain from conversation with the children during meals and never to comment on or show interest in what or how the children ate, their function being merely to wait on them and to help the youngest who could not wholly feed themselves.

Daily records of the children's weights, stools and temperatures were kept, together with notes of anything unusual in their conditions; biweekly urine examinations and monthly blood counts and physical examinations were made, and roentgenograms taken of their bones at frequent intervals.

Anorexia, other than as a transient loss of appetite with acute parenteral infection, was unknown among them, all eating heartily with keen appetite, day in, day out. It was not unusual for children to eat three or four bananas at a meal or five to seven servings of potatoes or meat. One child a year old frequently drank a quart of milk at his noon meal besides eating other food. Yet none were fat and all were solid well-built children, healthy and vigorous, presenting no problems in behavior. A few instances of vomiting or diarrhea occurred with an acute parenteral infection but, otherwise, there were no digestive disturbances and never any constipation, laxative being never needed or given to any.

The nutritional condition of these children was optimal as measured by any standards now available, i.e., by growth and weight, muscle tone and vigor, chest development, growth and quality of hair, red cell counts and hemoglobin estimations (Sahli).

The study demonstrated that under the conditions of the experiment and with such natural foodstuffs, young children could choose their diets and thrive without adult direction as to just what and how much of these foods they should eat. Furthermore, from the analysis of the 36,400 meals eaten by these children, it was apparent that their food intake in calories, proteins, carbohydrates and fats conformed closely to generally accepted standards—with the exception of being somewhat higher in protein than has been generally advocated for children of this age, but no higher than has been found advantageous by the study of diabetic children.

The significance of this experiment lies in two considerations: First—the furnishing of foods which have been shown by nutritional science to be of the highest value for body building and which had lost none of their vitamins and minerals in manufacturing or cooking processes. This is important because, obviously, no system of feeding or way of selecting foods for children can be successful if the food materials themselves are of inferior quality.

Second—the retention of individual appetite as the means by which actual quantities and articles from among these foods were eaten, thus preserving hearty appetite instead of suppressing or thwarting it, and eliminating at one stroke all problems of anorexia and eating behavior.

But, since both physicians and parents have always been distrustful of appetite as a guide in eating, and, particularly, in the very young, it is well to review briefly what we actually know about it and its companion, hunger.

The psychologic factors naturally dominant in the young child's eating are hunger, appetite, the pleasure that comes from the satisfaction of these, and the general sense of well-being and comfort that arrives with "enough" and temporarily ends all desire for food. This sequence, recurring day in and day out in its definitely established order, is an intrinsic part of the nutritional mechanism initiating and carrying on, as it does, the business of eating. Only when a child gets normally hungry by mealtime, eats with keen appetite and enjoys his food and ends his meals with the feeling of expansive good nature and well-being that comes from enough, do we say he is a "good eater".

The essential facts about hunger are well known. Its physiologic mechanism is centered in the stomach, which is the seat of slightly painful contractions when empty, and is not under the control of the higher brain centers. Hunger demands food—liked food, if such be available; if not, what can be had. It initiates eating but is itself short-lived, disappearing after the first mouthfuls of food as the stomach, no longer empty, ceases to have painful contractions. From this point appetite and the pleasure of its satis-

faction carry on, the end point of eating not being the satisfaction of hunger but the satisfaction of appetite and the feeling of "enough".

But of appetite, neither the physiologic mechanism, nor the natural behavior patterns are so well known. The sensations by which it is immediately and largely, if not wholly, guided in the mouth and nose, while its physiologic connections with the stomach make it the initial stimulant to the flow of gastric juices. Moreover, Pavlov (*) in 1905 demonstrated that in dogs appetizing food induced a greater secretion of gastric juices than foods that were not so well relished by the animals, and Miller, Bergheim, Rehfuss and Hawk (**) in 1920 reported like results from investigations on the "appetite" or "psychic" secretion of gastric juice in normal men. On the other hand, the relations of appetite to the higher brain centers are sufficiently intimate to make it highly susceptible to interference from these even to the point of suppression. And it is this liability to interference from the higher brain centers that makes the attempts to force appetite and feed children what they do not want so disastrous to good eating habits.

So much we know with assurance, but we are still ignorant of how hunger and appetite are related to each other or how and to what extent they are the accurate representations in consciousness of the body's metabolic needs. Nor do we know what determines the end of "enough" of all food or the end points of appetite for each of the different foods of a meal, which latter are obviously not coincidental since a child may have eaten all it wants of meat and potatoes and still have appetite for milk or fruits. From this uncertainty arises much of the confusion in thought and in practice on the question of trying to make the child eat what we think good for him whether he likes it or not, or letting him eat anything and everything he pleases.

The evidence for the trustworthiness of appetite as the guide in eating under simple and natural conditions is apparently valid. The "natural" diets of primitive people in widely different regions of the world have covered all the nutritional needs the modern science of nutrition has disclosed and have, therefore, been relatively foolproof as shown by both longevity and physical condition. Further evidence of the success of appetite as a guide to eating is furnished by the results of the self selection of diet study with the youngest children under conditions that precluded the handing down of dietary information or experience by either example or instruction.

What then are the limitations to its trustworthiness as a guide in eating? It fails, for example, to protect against the ingestion of unfamiliar poisonous plants and animals. Time and again not only children but adults as well have eaten poisonous fish and mussels, mushrooms, castor-oil beans, and berries—sampling is the primary method by which appetite gains its information and only tribal lore can protect against such "trick" varieties in which not infrequently the dominant flavor is much like that of non-poisonous ones, or is determined by the non-poisonous components. Appetite also fails as a guide and dietary deficiencies and digestive troubles hitherto unknown appear among primitive peoples (as, for example, happened in Labrador and in the Faroe Islands) when highly milled cereals, sugar and canned goods replace the fresh natural foods to which they have been accustomed. An experiment in which both fresh natural foods and those derived and stored products would be served to newly weaned infants might throw light on why appetite fails in this situation. That this problem of choosing from a mixture of better and worse foods was not posed by the food list of the experiment, did not escape the notice of some of the pediatricians who visited the experimental nursery. More than once the comment was made, "But, of course, your babies thrive. The list of foods you gave them is foolproof; they cannot have a deficiency on such a list". While this observation is not quite true, inasmuch as a child could have lived solely on milk and become anemic, what, it may be asked, is the objection to giving the child a relatively foolproof diet? Is it not, indeed, the simplest way of deciding what to provide for the young child?

APPLICATION TO HOSPITAL AND HOME FEEDING

The success of this study in diet warranted an application of its findings to hospital and home feeding but it was at once obvious that while the principles of offering those foods which nutritional science had shown to be the best for body building, and of self-selection by the infant from these, were responsible for its success, the experimental method of applying them, i.e., of serving nine to twelve articles of food three times a day, of which only a few were eaten at the meal, while indispensible for the experiment, was costly, wasteful of food and time, in short, utterly impractical for hospital and home. And when we once admit, as was shown by the experiment, that not only will the tastes of individual children differ widely and unpredictably from each other, but that unpredictable changes in the food likes and dislikes of the same child will occur from time to time, the question at once arises: How can these principles be simply and practically applied in hospital and home, under the direction of the pediatrician?

The hospital method outlined here was intro-

(*) Paulov, I. P. The Work of the Digestive Glands, Eng. Ed. 2 London, C. Griffin & Co., 1910.
(**) Miller, R. J. and others: Gastric response to foods, Am. J. Physiol., 52:1, 1920.

duced at the Children's Memorial Hospital in Chicago, in 1931, in one ward—the orthopedic—from which it has been expanded to all the other wards of the hospital with the exception of the infants (0 to 18 months of age). Its success, from the point of view of simplicity, lessened labor and improved appetites and nutrition has never been questioned. Under the plan, all children, including postoperatives in good condition, and excluding only individuals who for some reason such as diabetes or critical illness are unable to eat the full diet provided, are fed.

When the food arrives at the various wards from the main kitchen, it is put in large containers on the long carts used for carrying the children to operating rooms, etc. Pitchers of milk and of water, plates of buttered bread, stacked trays and dishes and eating utensils, complete the cart's load. These are then wheeled into each room of the ward and the nurse slowly and distinctly recites the menu for the meal, after which trays and eating utensils are distributed. Setting up of trays and dishing out of food in the diet kitchen and then carrying the trays to the children is eliminated by this method of serving.

Each child is served the items which he chooses in the quantity he wishes. To the youngest ones who cannot yet talk, the nurse offers something of everything. When there is gravy, a child may have it put on his meat, bread or potatoes and does not, as often happens in the routine of diet kitchen serving, have his meat or potatoes ruined for him by being covered with unwanted gravy.

The children are not urged to eat foods in any particular order or to eat everything on their plates before having a second helping of something they especially like, and the cart continues on its rounds through the rooms of the ward until each child has had as many helpings of the various dishes as he may wish.

1. With this way of serving it has been possible to enrich the diet by the addition of more butter, eggs and more fresh fruit, chiefly oranges, bananas and apples and, as will be shown, with no increase in expense, and special diets have been greatly reduced. Also has been eliminated the serving of fruit juice, milk, or anything else, between meals, since it has been found that children actually eat more at meals when these are omitted.

2. The saving in nurses' labor in carrying of trays and going back and forth to the diet kitchen when second or even third and fourth helpings are wanted is self-evident. The total mealtime has been shortened by 15 to 30 minutes, and a further cut in serving time and increased promptness of service could be gained in wards of some size were two double-decked serving carts available.

3. There is lessened food waste. This was proved by weighing the edible waste for each ward during many months after the introduction of the plan on the orthopedic ward. For six months the range on the other wards was from 24 to 50 pounds of edible food waste per patient. On the orthopedic ward, 12½ pounds—a reduction in no case less than 50 per cent—an important consideration when the average total census on these wards was slightly over 150, and one that went far toward enabling us to improve the diet.

Two factors were chiefly responsible for the reduction of food waste. (1) Children do not ask for what they do not want, or for more than they can eat. If they want only a half glass of milk, they say so. And the percentage of cleaned plates at the end of a meal is remarkably high. (2) The elimination of many mixed dishes and articles cooked or served in ways which make the uneaten remainder from the meal unusable for another meal. Apples, bananas and oranges are served whole, eggs, hard-boiled and in the shell, etc., can be served again if not eaten, since a child touches only what is on his plate, the supply remaining on the cart.

Obviously, saving of time and labor, lessened food waste and liberalization of diet, important as they are from the institutional standpoint, are not justified at the expense of children's welfare. The final tests of a new way of serving must be: Do the children thrive as well or better? Do they enjoy their meals as much or more? Are their appetites as good?

To these questions the answer is emphatically "yes". There are no appetite problems, nor digestive disturbances due to this way of feeding, and no poor appetites, save when grave disease makes this inevitable. Furthermore, not only are second helpings common, but many a tall, thin boy or girl has had four, five or six helpings of food and put on 10 pounds in weight within a few weeks.

As for enjoyment of meals, nothing could be more delightful than to see the children's added interest in them. Long before dinner and suppertime, they are wondering what they are going to have and the general air at meal times takes on something of the joy of a picnic. No disparaging remarks from the children have yet been registered and, not infrequently, a child about to be transferred to another institution has cried and said he did not want to go "because they will make me eat my cereal", "because I can't have all the helps I want", "because they make you eat what's good for you", etc.

The nutritional end in view has been approximately, though possibly not perfectly accomplished, by an enrichment of the diet rather than a strict use of only those foods known to be most valuable nutritionally, and the preservation of hearty appetite and joy in eating, while the

elimination of anorexia and eating problems has been completely attained.

The methods that are outlined for applying the principles of good food and self-selection in the home are those that have been successfully used by the author and others as well, but since it is the principles and not their application that are vital, these methods do not in all probability exhaust the possibilities of simplicity, economy and time-saving for mother and pediatrician.

The abrupt weaning of infants in the experimental nursery was an experimental procedure, dictated by the practical consideration that we could not keep the mothers in hospital or nnursery for gradual weaning of the child, and that sudden weaning would prove a more severe test of the infant's inherent capability of the choice of foods and his nutritional welfare at the earliest possible age. Such a drastic procedure seems to the author wholly unnecessary and having no sanction from the habits of animals or the experience of the human race.

In these days, where the giving of cereals and vegetables has been pushed further and further back into the nursing period—a practice the worth of which it is too early to evaluate—few children arrive at the weaning age without some experience of foods other than milk and fruit juice and without some well established likes and dislikes. Where such are known, it seems simplest to begin further additions of food with one meal a day at which at least one of those known to be liked is given and a new one added, new things being tried not once but several times, until everything on the list of the higher grade foods nutritionally has been offered. After two or three weeks of one meal a day, food can be added to the second meal in accordance with the schedule and, after a similar short period, to the evening meal.

During the period of less than three meals a day, it may be necessary to continue a fourth or night bottle, with somewhat shorter intervals between the meals, although most infants if allowed to have all they want are satisfied on the three feeding schedule in the latter months of the nursing period.

The interval for the transition may be somewhat shortened or lengthened, depending upon whether the infant takes readily to solid foods or not, since there is no valid reason for haste. If a child continues to take a larger portion of his diet as milk, he does not require large quantities of other foods to adequately supplement it, both from the point of view of anti-anemic qualities and vitamins, provided they be the fresh and complete foods of the higher grade list.

Starting with the young child after weaning, the first thing of importance is the technique of feeding—the essence of which is non-interference with or distraction of the child from the business of eating, and only such assistance as will enable the child to get the food which he can not eat with his hands or otherwise when unassisted, and abandonment of forcing or dictation of the order in which foods are to be eaten, as well as haste or impatience.

The wisdom of using the term "self-selection" or the phrase "allowing the child to chose its own food", in giving directions to the mother appear questionable since they seem to her to take all control of the child's diet out of her hands and to leave it wholly to the mercies of childish whims that she sees evidenced in other fields of its behavior. A more reassuring way is to give the mother a short list of foods made from the following list of those nutritionally most valuable, with the assurance that these are safe foods for the child to eat in any quantity he wishes, at the same time telling her that whether he eats all or only some is a matter of no importance. The other foods on the list may be added at one or two subsequent visits as seems advisable.

LIST OF FOODS MOST VALUABLE NUTRITIONALLY

To form the basis of the child's diet from weaning to 2½ years of age.

Fruits

- Orange juice
- Grapefruit juice
- Apples—raw and cooked
- Bananas—fully ripe, mashed until all of the first teeth have erupted
- Tomatoes—fresh and canned
- Fully ripe peaches
- Fully ripe strawberries—in season

Dairy Products

- Milk—sweet or sour (lactic milk)
- Butter
- Cottage cheese
- Mild domestic cheese

Cereals

- Whole wheat and
- Whole wheat products (commercial cereals)
- Whole corn meal
- Whole rice
- Whole grain oatmeal
- Ry Krisp
- Pablum
- Whole wheat bread or crackers

Eggs

Natural Sweets

- Honey
- 100 per cent Maple Syrup
- Darkest New Orleans molasses

Meats

- Liver
- Kidneys

Round steak, ground
Lamb or mutton—cheaper cuts as good as expensive chops
Fresh poultry
Veal
Bacon

Fish

Fresh fish (only of a large boned variety so that no small bones can be overlooked)
Canned Salmon of the deepest pink variety

Vegetables (fresh)

Potatoes—baked, boiled or mashed
Carrots—grated raw or cooked
Peas
Beets
Spinach
Green beans

Vegetables (canned)

Those prepared for infants and accepted by the A.M.A.

Instructions should include the division of all food by mashing or putting through an ordinary meat-grinder or, as in the case of cheese and raw carrots, by grating. The mother should also be instructed that vegetables should be cooked in as little water as possible and that water added to the serving to prevent loss of valuable minerals and vitamins, also that vegetables should be cooked and served separately.

Since some infants are sensitive to egg white, introduction of eggs into the diet is best accomplished by the use of hard-boiled eggs with the whites and yolks in the same dish but separated, as most infants who are sensitive to egg white will not eat it unless mixed with the yolk.

There is no need for sweet desserts and made dishes at this early age and no sugar should be added to any of the food, or seasoning such as pepper and spices which young children do not like.

Since the experience on the self-selection of diet study and in the Children's Memorial Hospital has shown that, when they are allowed to eat all they want of foods they like, children actually eat more food with better appetite on a schedule of three meals a day, with nothing between meals, than with more frequent feedings, the three-meal schedule will be adhered to in the suggestion for planning of meals that is advised as a further definite aid to the mother.

SUGGESTED MEALS

Breakfast

One of the following fruits: Orange juice, scraped raw apple, apple sauce, bananas, or tomato juice
Whole milk
Eggs or bacon or liver or kidneys, or any two of them.
One of the cereals on the list, with whole milk
Whole wheat bread or Ry Krisp if desired

Dinner

Meat
Potatoes
A vegetable
Ry Krisp or whole wheat bread and butter or, for the youngest, bread or Ry Krisp soaked in milk
Milk

Supper

Fruit
Cereal or bread or Ry Krisp
Cottage cheese or other mild cheese
Eggs or fish, if desired
Milk.

This arrangement, without designating which meat or which vegetable, permits the selection of these to be adjusted to the meals that are to be served for the family and lessens labor and time spent. If more convenient, dinner and supper may be transposed as it is an individual matter with children whether they choose to eat their heartiest meal at night or noon or breakfast and, in any event, almost all children eat two hearty meals and one lighter meal during the day.

For those who are older than two and a half years of age, the list of foods can be enlarged by additions from a list of foods less valuable nutritionally but in common use, to be used in smaller quantities and more occasionally, with emphasis still on those most nutritionally valuable.

LIST OF FOODS FOR OCCASIONAL USE BUT OF LESS NUTRITIONAL VALUE

(These should form no regular or considerable portion of the young child's diet)

Canned fruits
Prunes
Dates—pitted and Pasteurized
Boiled or baked ham
Hash—with care not to include any meat gristle
Pot roast
Soups—home made
Gravies
Macaroni and Spaghetti—cooked with tomatoes or cheese or both
White bread
White rice
Any fresh vegetables (except corn)—properly cooked
Canned vegetables, other than those especially prepared for infants
Nut butters
Cocoa
Ice cream
Cake and cookies—for the older ones—on rare occasions
Custards, gelatin desserts and simple puddings.

Mothers should be told that children's tastes vary from time to time and that articles of food

well-liked at one time may be refused at another for no apparent reason.

Foods that are disliked at their first appearance at a child's meal should be offered again from time to time, in small quantities, for a child will usually accept a wider variety of foods as he grows older. This is particularly desirable in the home for while a child may cover all his nutritional needs by a diet comprised of but a small number of foods, it will be more convenient for the household if he learns to eat a wider range of foods.

Finally, it should be again emphasized that there is no need for haste, nor should we be unduly distressed if the mother fails to cooperate 100 per cent. Rome was not built in a day, nor can the fears of the mother because her child does not eat exactly acording to the pattern of her neighbor's child be instantly dissipated. Confidence gained step by step is a better augury for success than unwilling cooperation in the full program accompanied by distrust and fear. And if a mother skimps at times on allowing a child to have all he wants of something because she "thinks it is too much for him", or cuts out some articles that we consider important or adds others that she thinks he ought to have, we must not be unduly distressed, remembering that she is subjected to much propaganda, commercial or otherwise, for and against certain foods. Children have survived and will survive under the limited diets now in vogue and even under poor home diets and in the face of the most annoying appetite problems. We can feel well satisfied with the enrichment and the improvement of the diet and nutrition that inevitably result from better appetite and lessening of feeding problems.

550 OAK STREET.

The Seven Diagnostic Criteria of Uncomplicated Syphilitic Aortitis

1. Teleroentgenographic (anteroposterior and left anterior oblique positions) and fluoroscopic evidence of aortic dilatation, especially if localized to ascending aorta.
2. Increased retromanubrial dulness.
3. A history of circulatory embarrassment, especially exertional dyspnea, with or without progressive cardiac failure.
4. A tympanitic, tambour, bell-like quality to the second aortic sound, with or without marked accentuation.
5. A rough systolic aortic murmur, usually transmitted upward, downward, or both.
6. Substernal, less frequently precordial, dull, aching pain, usually without radiation or relation to exercise.
7. Paroxysmal dyspnea, not exertional and usually nocturnal.—Supplement No. 5. Venereal Disease Inf., U.S.P.H.S.

Syphilis and Pregnancy

Pregnancy is good for syphilis but syphilis is NOT good for pregnancy.

Pregnancy Is Good for Syphilis

1. Few syphilitic pregnant women have lesions.
2. History and physical examination are nearly worthless to diagnose syphilis in this group.
3. The diagnosis can be made only by serologic tests.

Do routine blood serologic tests on every pregnant woman.

Syphilis Is NOT Good for Pregnancy

1. A syphilitic woman has a 16 per cent chance of a normal living child.
2. The birth of syphilitic babies is preventable.
3. Congenital syphilis is the disgrace of modern medicine.

Do routine blood serologic tests on every pregnant woman.

TO FIND CONGENITAL SYPHILIS

1. Suspect every baby of known syphilitic mothers whether or not treated before or during pregnancy.
2. In such children do:
   a. Dark-field examination of scrapings from wall of umbilical vein.
   b. X-ray of infant's long bones at 2 weeks.
   c. Blood test at 2 weeks.
   d. If these are negative, serologic follow-up monthly for 6 months; every 6 months for 2 years.
3. In babies, suspect syphilis in:
   a. Puny, ill-nourished, wizened, "won't gain" infants.
   b. Skin rashes of any type.
   c. Snuffles.
   d. "Pseudoparalysis".

   and check suspicion by routine serologic test.
4. In older children and adolescents, suspect syphilis, especially:
   a. "Pink eye" (interstitial keratitis).
   b. Deafness unless clearly middle ear.
   c. Hydrarthrosis of the knees (Clutton's joints).
   d. Osteomyelitis.
   e. Peculiar dentition.

   and check suspicion by routine serologic test.

TO FIND LATE AND CONGENITAL SYPHILIS

1. Examine every member of the family of every syphilitic patient—wife, husband, children.
2. Do routine blood serologic tests on all of them!—Supplement No. 5. Venereal Disease Inf., U.S.P.H.S.

SPONTANEOUS HYPOGLYCEMIA ASSOCIATED WITH PANCREATIC ADENOMA: CASE REPORT WITH OPERATION AND AUTOPSY*

By LOUIS A. LEVISON, M.D., and THOMAS L. RAMSEY, M.D., TOLEDO, OHIO

THE relatively rare instances of pancreatic adenoma with hypoglycemia (hyperinsulinism) warrant the inclusion of another proven case to the list. Hypoglycemia from whatever cause is comparatively common, so-called hyperinsulinism less so, proven adenomas in routine autopsies about once in a thousand times but proven adenoma with operation remains definitely uncommon.

CASE REPORT

Mrs. M. M., Bohemian housewife; aged 54; long time Ohio resident; observed during the period Aug. 12 to Aug. 25, 1937.

The history of this patient was obtained in considerable detail and probable accuracy in the office of one of us and later in St. Vincent's Hospital, Toledo, Ohio, where she was admitted Aug. 12. Her personal history was supplemented by that given by several of her nine children. She was a patient in St. Alexis Hospital, Cleveland, in 1935. Her present trouble began gradually three years ago with periods of extreme weakness as her first symptom. She tired easily, but drowsiness did not appear until several months later. The periods of weakness became so pronounced that there was difficulty walking from room to room, alternating with her usual well-being. The performance of ordinary household duties was followed by extreme fatigue. Headaches of considerable severity occurred frequently. Later, the drowsiness appeared and became the most noteworthy complaint. During the attacks of drowsiness or stupor, she would be either quiet, throw the hands and arms about aimlessly, stare fixedly, or moan loudly. It could not be determined that these attacks of stupor occurred at regular intervals or periods of the day or night. Many of the attacks occurred around 11 A. M. The earlier attacks resolved spontaneously, and only later did the family learn to manage them with food or sugar.

It was stated by members of the family that the blood sugar readings in Cleveland in 1935 showed figures as low as 33 mg. The liberal use of glucose by ingestion was adopted by the patient following this first hospital sojourn and after her return home where she remained until the time of her second hospital admission in 1937. She stated that she used a pound or more of sugar or glucose daily in addition to her usual diet to relieve or prevent attacks. There were never any digestive disturbances or unnatural variations of appetite throughout this period. The increased glucose ingestion resulted in a weight increase from 118 pounds (53.6 kg.) in 1935 to 187 pounds (85 kg.) in 1937. The glucose was used rather irregularly, but especially at the time of anticipated attacks of drowsiness, often around 11 A. M. It was definitely noted that a liberal food intake at meal time did not protect against possible attacks of drowsiness an hour or two later. A fixed food relationship between meals and the attacks could not be determined. The long food-free interval between the evening meal and the breakfast of the following morning was not usually associated with trouble. The continued attacks, the forced feedings, the large amounts of glucose ingested, the increasing obesity, lead to a picture of apathy, sluggishness, loss of energy and weakness. It was probably true that the use of glucose and the food manipulation at home during this period was variable and inexpert, but in any case, it did not prevent the attacks from appearing in increasing numbers and greater severity.



Fig. 1. Photomicrograph showing the Islet type cells in pseudo-rosette and ribbon formation around small capillary vessels and between bundles of hyalinizing fibrous connective tissue.

Previous History: No record of previous ill-

*From the Medical and Pathological Departments of St. Vincent's Hospital, Toledo, Ohio.

Submitted April 13, 1938.

The Authors

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Fig. 2. Photomicrograph showing typical Islet cells but with a typical arrangement; some of the cells showing large hyperchromatic nuclei; the dense connective tissue stroma is very pronounced.

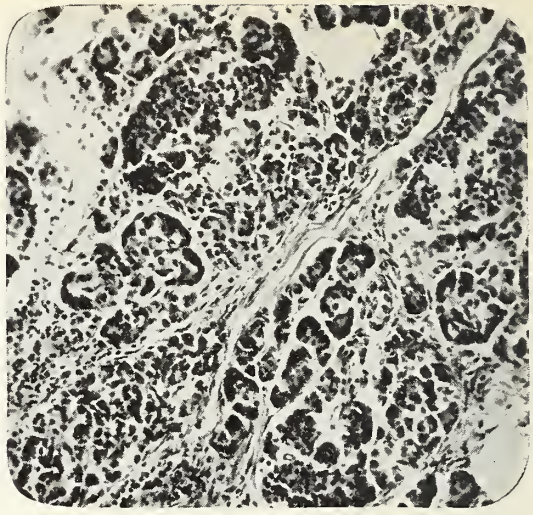


Fig. 3. Photomicrograph showing atrophic pancreatic tissue surrounding the Islet adenoma; two atrophic appearing islands are seen in the upper portion of the photograph.

ness of importance could be determined. She had nine living children, all of whom are said to be well. The menopause was uneventfully passed ten years before.

Examination: The patient was an obese woman, weight 187 pounds (85 kg.), height 65 inches (165 cm.), with no lesions of the skin or mucous membrane. The temperature, pulse, and respiration were normal prior to the operation. There was moderate pallor, but no cyanosis or jaundice. A few lower incisor teeth in poor condition remained, but the remainder had been removed nine years ago. Dental plates were worn. Normal findings were noted in respect of tonsils, pharynx, nose, sinuses, ears, and head. Hearing and vision were good. There was no exophthalmos or nystagmus and the pupils reacted well to light and in accommodation. The thyroid was not enlarged or palpable. No lymph gland enlargement was noted. The thorax was broad, well developed, and fat. The pulmonary findings were normal. The heart was not enlarged. The cardiac tones were of poor muscular quality and not loud. The rhythm and rate were normal, and murmurs were not determined. The blood vessels were moderately sclerosed and the blood pressure 190/100. The abdomen was fat with definite tenderness over the upper right quadrant and the epigastrium. The liver and spleen were not enlarged or palpable. The pelvic and rectal finding were normal. Examination of the nervous system, muscles, and joints was negative. Edema was never present. There were moderate varicosities of the veins of both legs.

Laboratory findings: The hemoglobin was 95 per cent; the red blood cell count 4,300,000; white blood cell count 5,600; the differential blood count negative; the sedimentation rate within normal limits, and the Wassermann reaction negative. The urine was clear, acid, sp. gr. 1016, showed no albumin, sugar, casts, blood, or pus.

Blood Sugar Data: An office blood sugar reading at 1 P. M. and one hour after a light noon meal was 112 mg. Hospital readings of the fasting, morning blood sugar were determined variously as 38 mg., 55 mg., 61 mg., and 85 mg. These findings were determined after food abstinence for 12 to 14 hours. Blood sugar determinations made during the attacks of stupor or coma varied from figures too low to read, according to the laboratory reports, to 33 mg. The blood sugar tolerance determination after the administration of 1.5 grams glucose per kilo body weight dissolved in 300.0 cc. water showed a reading of 61 mg. before ingestion, 85 mg. in one-half hour, 235 mg. in one hour, 222 mg. in two hours, 122 mg. in three hours, and 64 mg. in four hours.

The clinical course from the time of the hospital admission was eventful. There were numerous attacks which usually began with a groan, then stupor, followed immediately by a convulsion with clonic movements of the arms and legs. The patient could not be aroused during these attacks and blood stained saliva ran from the corners of the mouth. Nystagmus, usually of a rotary character, was present. The pulse was absent or very weak, and the blood pressure would drop markedly. Following recovery from the attack, the blood pressure would rise to 160/100. The seizures occurred at various times of the day or night, but daily.

It appeared from the persistent tenderness over the gall bladder region, the relative spasticity, and the X-ray report of a non-functioning gall bladder, that a chronic cholecystitis was present. Further presumptive weight was given this opinion by the obesity following the excessive glucose ingestion. The inability to control the onset of the convulsive seizures by diet and frequent feedings, with or without the use of glucose, prompted the decision to search for the presence of pancreatic adenoma.

Operation was done by Dr. F. M. Douglass Aug. 20, 1937. A transverse incision over the upper right abdomen showed a large gall bladder containing stones. The pancreas was explored and a definite tumor could not be determined on palpation. There appeared to be a hard or indurated area at a point between the head and the middle of the pancreas. A section from this area was removed for microscopical study. A routine cholecystectomy was done; 50 cc. glucose (50 per cent) was given twice daily in-



Fig. 4. Photomicrograph showing a thick walled blood vessel in the neoplasm.

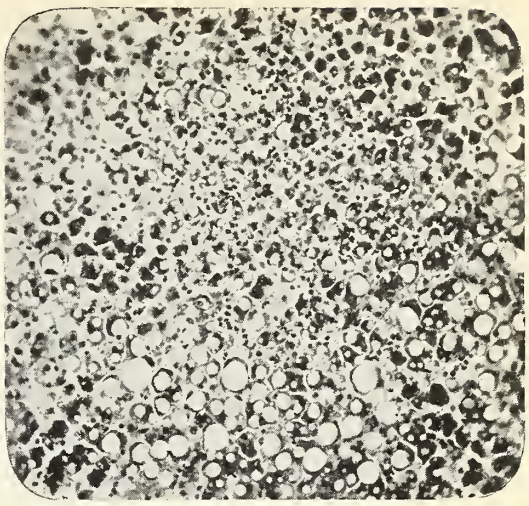


Fig. 5. Photomicrograph showing section of liver; advanced fatty degeneration with toxic necrosis present in the lobules.

travenously and no further seizures followed the operation. Death occurred rather suddenly on the morning of Aug. 25th (fifth day) during a short unconscious period without convulsions.

Autopsy (Dr. Thomas Ramsey):

The remaining portion of the pancreas weighed 75 grams. There was considerable fatty infiltration between the lobules of the gland. An encapsulated nodule measuring 1.5 cm. in diameter was found in the tail of the pancreas. The nodule was well demarcated and pale pink-yellow in color. The growth was separated from the pancreatic tissues in most areas by a thick fibrous wall. This fibrous connective tissue capsule extended directly into the substance of the growth forming irregular bands and small nodular masses between the areas of tumor cells. The epithelial elements in the growth were seen as irregular sheets and infiltrating columns of cuboidal, pyramidal, and polyhedral shaped cells, some in ribbon-like formation, others forming rosette-like clusters around small open spaces and around small capillary blood vessels. This gave the growth an adenomatous appearance. The cell nuclei varied considerably in appearance in the different areas—some were hyperchromatic, some large and irregular in shape, and others small and pale staining. Only occasional mitotic figures were present. There was no definite invasion of the blood vessels by the tumor cells. There was a resemblance to poorly formed ducts in some areas. Some of the small cell masses were surrounded by dense hyalinizing connective tissue similar in appearance to a scirrus carcinoma. The cells resembled islet cells in some areas with small round nuclei, but in most areas irregular alveoli and poorly formed ducts were present.

Pathological Diagnosis: 1. Adenoma of the pancreas. 2. Fatty degeneration and chronic passive congestion of the liver. 3. Chronic cholecystitis with calculi and hepatitis. 4. Old pleural adhesions, terminal congestion, and edema of the lungs. 5. Degenerative changes in other viscera.

COMMENT

It was stated definitely by the operating surgeon that careful palpation of the exposed pancreas did not reveal the tumor to him, and that there was no difference in density or induration at the point where the tumor was later found at autopsy. the patient was very obese and the operative exploration was done with considerable difficulty. It was decided not to remove the tail of the pancreas without suggestive evidence of tumor on account of the indifferent results in similar cases in which this procedure had been carried out. The segment of the pancreas, 3 x 2 cm., which was removed from the region behind the head on account of the suggested induration did not show tumor formation on later microscopical examination.

The operative procedure in this case emphasizes the difficulty in determining pancreatic tumors due to adenomata, even under the examining hand of the surgeon. The pre-operative clinical course of the disease in this instance illustrates again the lack of definite relationship between the time of eating and the occurrence of convulsive seizures or drowsy attacks. The irregular appearance of such attacks in this case could not be adequately explained. Apparently, hypoglycemia would appear suddenly and without preliminary or warning symptoms. The blood sugar studies also showed that individual, fasting, morning determinations were not sufficient to make the diagnosis. Such readings were, on occasion, entirely normal. The association of the pancreatic adenoma with chronic cholecystitis with calculi is noteworthy. This relationship has been previously pointed out. The only evidence of clinical cholecystitis was the tenderness in the right upper abdominal quadrant, the moderate spasticity, and the X-ray report of a non-functioning gall bladder.

Careful inquiry elicited no history of indigestion at any previous time. It was a questionable point, but probable, that the long continued, ex-



Fig. 6. **Gross photograph.** This shows the encapsulated adenoma in the tail of the pancreas. The growth measured 1½cms. in diameter and was rather firm and grey to pink in color. The tissue was well differentiated from the surrounding pancreatic structure.

cessive use of glucose for therapeutic purposes over the period 1935 to 1937 was responsible for the cholecystitis and calculi, as it certainly was for the obesity. This possibility of excessive obesity is a reason for earlier surgical intervention and exploration in instances where tumor seems to be present. There was a difference of

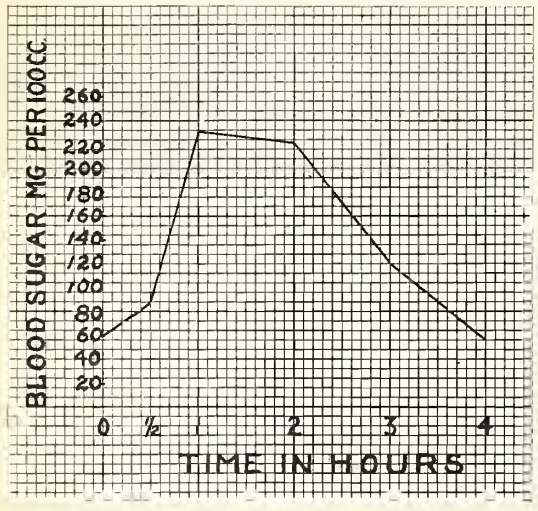


Fig. 7. Glucose tolerance test. 117.5 grams (1.5 grams per kilo) in 300 cc. water. All urine specimens negative for sugar.

70 pounds in this case from the onset of the disease to the time of operation. It is recognized, however, that the absence or inability to find tumors in occasional operated cases will be a deterring factor. It would seem from this case that the tail of the pancreas should be removed regardless of tumor when the symptoms and seizures are advanced and severe.

421 MICHIGAN STREET.

Diverticulitis

The common lesions found in the colon are diverticula and their sequelae. The surgical treatment of these lesions consists primarily in treating the complications whose occurrence is somewhat restricted to the sigmoid colon. The patient is prepared by administering mineral oil, ounces 1, and fluid extract of cascara, drachm 1, the night before the examination. At 8:00 a. m. a thorough soap suds enema is given. At 9:00 a. m. plain water is used for colonic flushing until the water returns clear. A barium enema is then given on the roentgen table. The barium mixture consists of barium, one pound; powdered acacia, ounces four, and water, three quarts. The mixture may be varied to change the consistency by the addition of more water or barium, but the final mixture should be fairly thin. This is injected and its progress noted under the fluoroscope. Rather forceful manipulation should be done in order to spread the mixture thoroughly, observing areas of spasticity and filling defects. A picture is then taken. The patient is then permitted to go to stool and evacuate as much as possible. Following the evacuation, air is injected through a rectal tube connected with a bulb from an ordinary nasal atomizer. The patient is watched under the fluoroscope while manipulating the air in the colon. When distention is satisfactory the final picture is made. This offers a more satisfactory method of determining the number of diverticula, some of which are not visible when the colon is filled with barium.

TREATMENT

A diagnosis of diverticulosis should be considered primarily a medical problem. Treatment consists in a fruit diet, with no roughage, and paraffin oil. Sedatives and antispasmodics may be employed. Belladonna and calcium may be of value. There is a relative rarity of severe complications and concomitant carcinoma. However, the resulting inflammatory reactions are not uncommon and diverticulitis must be considered an important though relatively late comer in the field of surgical diagnosis.

The surgical treatment of the complications of diverticulitis require infinitely more individualization than appendicitis.

Chronic or peridiverticulitis should not be rushed at surgically. Carefully planned conservative measures are preferable and will help more of us to dissent from the tacit confession of burnt fingers, following too hasty surgical intervention.—Edwin A. Nixon, M.D., Seattle, Wash.; Northwest Med., Vol. 37, No. 4, April, 1938.

The lawyers are the cleverest men, the ministers are the most learned, and the doctors are the most sensible.—O. W. Holmes.

MANAGEMENT OF BURNS OF THE CORNEA

By ARTHUR M. CULLER, M.D., Dayton, Ohio

BURNS of the cornea behave differently than mechanical injuries. The principal danger from direct trauma often lies in the possibility of infection. A finger nail scratch of the cornea is superficial but it is practically a hypodermic injection of bacteria. Such an injury should be treated from the onset as though it were infected. The purpose of this paper is to emphasize the fact that burns of the globe are sterile. Antiseptics are unnecessary and may be harmful.

Burns of the eye show three stages: I. the initial injury, II. the inflammatory and exudative reaction, and III. the stage of regeneration.

I. **The initial injury** consists of a coagulation of cell proteins. This may be caused by a wide variety of agents, which may be classified as follows:

a) **Thermal injuries**

1) Heat is a common cause of burns of the globe in factories where there may be exposure to molten metal, boiling oil, steam or explosive mixtures.

2) **Freezing** of the cornea has been described by Carroll[1] and others but has certainly occurred rarely until the recent advent of mechanical refrigeration. Sulphur dioxide is commonly liquified under pressure in these machines. If this pressure is released through a break in the system the rapid evaporation of the liquid may be explosive. These explosions have resulted in an unusual type of injury which Clark[2] has described in two cases. The rapidly expanding gas may freeze the cornea instantly. The explosion also carries the liquid sulphur dioxide into the eye where, in combination with water, it forms sulphurous acid, providing the possibility of both freezing and acid burns. The victim usually inhales some of the irritating gas which distracts his attention from the immediate treatment of his eyes.

b) **Chemical injuries** may be caused by: 1) acids, such as sulphuric acid, which is used in soldering, 2) alkalis, such as lime, or 3) caustics, under which we include substances such as alcohol, phenol, iodine, the aniline dyes and corrosive gases, such as are used in war.

c) **Actinic burns** are due to the fact that a high percentage of ultraviolet light is absorbed by the cornea and conjunctiva. They vary in severity from the simple actinic keratitis due to inadequate protection of the eyes during use of an ultraviolet lamp to the severe cases of "snow blindness" and photophthalmia from arc welding. The abiotic action of ultraviolet light has been investigated by Duke-Elder[3]. A latent period of "photochemical induction" usually lasts six to eight hours so that the opthalmologist is sometimes called in the middle of the night because of the sudden onset of pain, blepharospasm and photophobia.

The pathology of all burns, whether thermal, chemical or actinic, is essentially the same. Briefly this is a coagulation of cell proteins. Most agents produce a tough coagulum which is sterile from the very nature of the injury. It forms an effective barrier against subsequent infection. The removal of this coagulum serves no purpose and may do serious harm. Among chemical injuries, alkalis and aniline dyes are exceptional. As Hubbard[4] has pointed out, alkaline proteinates are soluble and probably do progressive damage as they infiltrate the tissues of the eye unless they are neutralized. Acid proteinates, on the contrary, are insoluble and neutralization is unnecessary. Aniline dyes, such as "Lash lure", also seem to infiltrate slowly producing progressive damage, although as McCally, Farmer and Loomis[5] have reported, a hypersensitive element is also present in these cases.

The burn caused by ultraviolet light varies with the amount of exposure. Changes appear first in the epithelium of the cornea and conjunctiva. The cells at first swell giving rise to the subjective appearance of halos. A marked oxyphil degeneration occurs followed by desquamation of epithelium so that there is punctate straining of the cornea with fluorescein. The substantia propria and endothelium in severe exposures may undergo similar edema and degeneration. It must be remembered that these short waves are partially transmitted to the lens where traumatization of the cells of the lens capsule has been demonstrated by Duke-Elder. I have

Read before the Section on Eye, Ear, Nose and Throat, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

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recently seen a cataract in a man of 28 which had appeared and gradually progressed to maturity following a flash from an arc welder.

II. The **inflammatory and exudative reaction** to a burn quickly follows the initial cogulation of cell proteins except in photophthalmia. Neuman[6] made photomicrographs of the progress of chemical burns in the eyes of experimental animals. The second stage consists of a rapid congestion of conjunctival and scleral blood vessels, the infiltration of transudate into the interspaces of the cornea and episcleral tissue, chemosis and corneal edema. Thrombosis of scleral vessels follows. This greatly depletes the vitality of the already injured tissues and is the cause of delayed healing and deep scarring in severe burns. Sterile necrosis and sloughing of cornea and sclera may occur. The height of the reaction takes place in 23 to 48 hours and this stage merges gradually into the stage of regeneration.

III. If the injury was superficial, regeneration of epithelium is rapid, although recurrent corneal erosions may form troublesome sequelae if treatment is discontinued too soon. The fornices may be obliterated by deep scarring. Symblepharon may form due to the apposition of denuded areas on the lid and globe. If scleral vessels were thrombosed, the sloughing corneal stroma will heal by the ingrowth of thick vascular sheets apparently from episcleral vessels. Attempts to halt this vascularization by cauterization or peritomy only prolong the stage of inflammatory and exudative reaction.

TREATMENT

The classical immediate treatment of chemical burns of the cornea is neutralization of the injuring agent, though Hubbard stressed the importance of early irrigation with water instead of delaying treatment until neutralization could be accomplished. However, his experiments on animal eyes seem to show that alkali burns heal with less scarring if slightly acid solutions such as 1 to 2 per cent acetic acid or 10 per cent neutral ammonium tartrate are used for irrigation because of the progressive infiltration of soluble alkaline proteinates. Acid burns in his experiments apparently were aggravated by attempts at neutralization.

First aid treatment of chemical burns is prompt irrigation with water. Industrial surgeons should educate workmen to immerse their eyes in hands cupped under a water tap in cases of chemical burns, before proceeding to the medical department. The physician informed of a chemical burn of the globe should instruct the patient to wash out his eye with water before coming to the office. In this connection I should like to call attention to an exception to this rule. New refrigerants are now replacing sulphur dioxide. These substances are F-12, which is dichlor-difluor-methane, and F-114, which is dichlor-tetrafluor-ethane. Both of these substances are gases at ordinary room temperatures but are easily compressible to liquid. The liquid if introduced into an eye causes irritation which is largely due to the rapid evaporation with possible freezing of the tissues. These liquids are miscible with oil but are not soluble in water. Therefore, immediate treatment of burns with these refrigerants should be irrigation with a bland oil such as olive oil.

When the physician sees the patient who has sustained a chemical burn, neutralization need not be attempted except in the case of alkalis and possibly aniline dyes. For alkalis 1 to 2 per cent acetic acid does not irritate the eye as much as 10 per cent neutral ammonium tartrate, and does not grow moulds as does the latter if one attempts to keep a supply in the office; 5 to 10 per cent tannin has been recommended for aniline dyes. The first step in treatment, then, should be a search for and removal of any remaining foreign matter, and neutralization of the agent if necessary. The edema and exudation of the second stage may so embarrass circulation as to actually cause thrombosis, and further aggravate the debility of the traumatized tissues. Neuman excised necrotic conjunctiva and inserted a transplant of mucous membrane from the lip in 48 eyes. In comparison with 109 eyes treated conservatively his results from the standpoint of vision and symblepharon were better in the operated cases.

Heinsius[7] tested the action of cod liver oil and Vitamin A on rabbits' eyes which had been subjected to abrasion of the cornea. He found definite acceleration of regeneration of epithelium under the influence of vitamin A.

Stevenson[8] used cod liver oil in the treatment of a patient who sustained a burn of the cornea with liquid caustic soda. The patient obtained complete return of function with no symblepharon, and returned to work in five days. He also reported similar results in simple abrasions of the cornea.

The importance of keeping the swelling and passive congestion at a minimum must be emphasized. Manipulation of the injured eye should be as gentle as possible. For instance, the bits of carbon that are buried in the cornea in an explosion may be removed if this can be done easily but a laborious search for multiple foreign bodies aggravates the reaction in already abused tissues and through increasing the swelling and slowing the circulation, increases the likelihood of thrombosis. The reaction so increased may delay healing more than the presence of the foreign bodies themselves. Extirpation of necrotic tissue as recommended by Neuman is theoretically objectionable because of this danger.

The efficient application of ice compresses continuously for 24 to 48 hours as stressed by Clark

TABLE I—SUMMARY OF 7 CASES TREATED WITH ANTISEPTICS.

No.	Eye	Agent	Extent of Injury				Treatment	Rtd. to work (Recovery)	Vision Recovered	Persistent Signs	Persistent Symptoms
			Lids	Conj.	Sclera	Cornea					
(1)	O. D.	Molten Iron	—	—	+++	++++	Ice; Atropin, Metaphen,O.O.	28 days	6/7.5 6/6	Small macula. Sl. symble-pharon	None
(2)	O. U.	Acety-lene ex-plosion	+++	++	—	++	Ice; Atropin, Metaphen,Hol. Ointment	18 days	6/6 6/6	None	None
(3)	O. U.	SO_2	+++	+++	+++	++++	Oil, antisep-tics, atropin	No	M.S. M.S.	Corneal leukoma Symble-pharon	Loss of vision
(4)	O. U.	SO_2	+++	+++	+++	++++	Ice; Atropin, oil, antiseptics peritomy	No	M.S. C.F. 3′	Leukoma	Loss of vision
(5)	O. S.	Na OH	+++	++++	++	++	Neut. ammon, tartrate;Meta-phen, O.O. Atropin	12 days	6/6 6/6	Sl. Sym-blepharon	None
(6)	O. D.	Lime	++	++++	++	+++	Neut. ammon. tartrate;irrig. Atropin; Ice; Metaphen	65 days	6/15 6/7.5	Maculae; Atrophic scar of conj.	Poor vision
(7)	O. D.	Na OH	+++	+++	++	++++	Neut. ammon. tartrate; Atropin	75 days	M.S. 6/6	Leukoma, secondary glaucoma	Irrita-bility, poor vision

TABLE 2—SUMMARY OF 13 CASES TREATED WITH CONTINUOUS ICE COMPRESSES BUT NO ANTISEPTICS

No.	Eye	Agent	Extent of Injury				Treatment	Rtd. to work (Recovery)	Vision Recovered	Persistent Signs	Persistent Symptoms
			Lids	Conj.	Sclera	Cornea					
(1)	O. S.	550° Varnish	+	++++	+++	+++	Ice; C.L.O. Atropin	8 days	6/6 6/6	None	None
(2)	O. S.	Molten Iron	++++	++++	++++	++	Ice; O.O. Atropin	5 days	6/15 6/15	Atrophic scar of lid & semilunar fold	None
(3)	O. D.	Molten Iron	+	++++	++++	+	Ice; O.O. Atropin	4 days	6/6 6/6	Atrophic scar of conj.	None
(4)	O. U.	Acetylene Explosion	+++	++	+	+++	Ice; O.O. Atropin	10 days	6/6 6/6	Fine scars below Bowman's membrane	Headaches
(5)	O. S.	H_2SO_4	+	+++	—	+++	Ice; O.O. Atropin	5 days	6/7.5 6/7.5	None	None
(6)	O. S.	H_2SO_4	+++	++++	—	++++	Ice; O.O. Atropin	15 days	6/7.5 6/7.5	None	None
(7)	O. U.	Salicylic Acid	+	+++	—	+++	Ice; C.L.O. Atropin	7-30 days	6/15 6/15	Recurrent corneal erosion	Photophobia
(8)	O. U.	SO_2	++	++	—	+++	Ice; Min.oil, Atropin	6 days	6/6 6/6	None	None
(9)	O. S.	Lime	+++	++	++	++	Ice; O.O. Atropin	15 days	6/12 6/12	Macula at limbus	None
(10)	O. S.	Lime	++	++++	+	+++	Ice; O.O. Atropin	5 days	6/7.5 6/7.5	Atrophic scar	None
(11)	O. S.	Iodine	++	++	—	++	Ice; C.L.O Atropin	5 days		None	None
(12)	O. S.	Molten Iron	—	+	—	+++	Ice; O.O. Atropin	3 days	6/12 6/12	Atrophic scar in conj.	None
(13)	O. S.	Alkali	++++	++++	++	+++	Ice; O.O. Atropin	30 days	6/6 6/12	Episclerol Scar. nebula.	Some

O.O.—olive oil. C.L.O.—cod liver oil.

is highly successful in keeping the reaction at a minimum, especially when combined with a minimum of manipulation, and instillation of a bland oil and atropin.

In regard to the efficacy of cod liver oil, whatever the effect on corneal epithelium, I am sure the vitamin A concentrates produce a scaly blepharitis that often necessitates discontinuing their use. The more dilute concentrations are less irritating. Clinically I have seen little difference between the progress of cases in which cod liver oil has been used and those treated with olive oil. I therefore attempted to duplicate the experiments of Heinsius. A small series of 22 guinea pig eyes which had been subjected to injury by mechanical abrasion or a burn with sodium hydroxide showed no significant difference in the regeneration of epithelium with instillation of cod liver oil or olive oil. Antiseptics are commonly used as a precaution against infection but these caustics are sterilizing in their action and they precipitate a coagulum that will protect the tissues below until the detritus is displaced by new formed tissue. The use of any antiseptic constitutes unnecessary irritation of an inflamed eye. Even when scleral thrombosis occurs and the cornea forms a necrotic plaque in the center, cultures of this tissue show no growth of organisms. Thermal or chemical cauterization, as I have personally discovered, is contraindicated. If exudate and chemosis are kept at minimum with oil and ice compresses the desquamation of necrotic tissue will take place gradually as healthy tissue grows in to replace it.

In the third stage symplepharon can be avoided usually by keeping the conjunctival sac filled with olive oil, using the minimum of manipulation that is necessary to free adhesions as they form. If symblepharon forms, grafts for repair should be delayed a year or longer to give the eye opportunity to recover from the original injury.

The accompanying tables illustrate two small groups of patients who have sustained severe burns of the globe including the cornea. Cases of actinic keratitis are not included because these patients uniformly recover rapidly with ice compresses and olive oil instillations unless the lens is damaged.

Table No. I is a summary of seven cases, two of burns with heat, two of freezing with sulphur dioxide, and three of alkali burns. In these cases no attempt was made to minimize manipulation. The alkali burns were irrigated freely with neutral ammonium tartrate. All had irrigations and antiseptics administered. The impression derived from the progress of these patients corroborated the view often expressed in the literature that the length of disability and the degree of scarring were out of proportion to the original injury in some cases.

Table No. II summarizes the record of thirteen patients, five of whom sustained corneal burns with heat, one with sulphur dioxide, three with acid, three with alkalis, and one with a caustic. There is no suggestion of comparison between the two tables because no two burns are strictly comparable in extent and depth of the injury. Burns certainly occur in which the injury is so extensive that there is no hope for recovery of vision under any treatment. An attempt has been made to estimate the depth and extent of tissue damage in the various structures, the lids, conjunctiva, sclera and cornea by one to four plus signs. The treatment in the second group of cases was directed primarily at minimizing the inflammatory and exudative reaction, thereby avoiding, if possible thrombosis of the scleral vessels. It consisted of continuous applications of ice compresses for 24 to 48 hours, the instillation of atropin and a bland oil and, in some cases, a darkened room. Under this management of burns, individual patients have recovered as soon as I expected and a few have had a return of function beyond my expectations.

SUMMARY

In a meager experience, results in individual cases seem to justify an ultra conservative management of burns of the cornea. First aid treatment should consist of prompt irrigation of the eyes with water in the case of chemical burns. The inflammatory reaction should not be aggravated by the prolonged manipulation of the injured eye. Continuous ice compresses are effective in minimizing the reaction. Following the application of ice compresses for 24 to 48 hours, the eye needs rest for recovery and regeneration of tissue. Atropin, and a bland oil, and perhaps, a darkened room aid in furnishing rest. Some manipulation is necessary to avoid symblepharon if denuded areas lie in apposition.

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DISCUSSION

R. E. Boice, M.D., Toledo, Ohio: I wish to take this opportunity to thank Dr. Culler for his excellent presentation. I wish to emphasize the fact that antiseptics and stimulants are not only unnecessary but may actually be harmful. When

an eye has been very slightly injured it perhaps will tolerate further insult, if it be not too great, but our purpose as doctors should be to interfere in no way with healing.

When I was an intern I was treating a lime burn with mercurchrome, which was just being introduced. The eye was doing anything but well. When the chief returned from a short absence I tried to defend my position in vain, I was told that I should realize that all burns were sterile, and as to stimulating treatment, "it had had Hell stimulated out of it already."

That brings up the point that all antiseptics and germicides are destructive agents and one of our best weapons in treating a dirty ulcer is the actual cautery.

It takes a pretty strong eye to withstand the onslaughts of antiseptics and cauterization.

One of my first lessons in burns was from an old ophthalmologist treating a gunpowder burn of the eye. The instructions were to wash out all the loose powder and to remove mechanically only what would come out easily without further trauma. Then to fill the culdesacs with a heavy ointment and put on a dressing. The next morning most of the remaining powder could be removed with an applicator.

The same ophthalmologist told me that no self-inflicted curling iron burn was serious, no matter how extensive as it was always superficial, at the first contact the hand pulled the iron away and the head jerked back. Only bland ointment and a pad was necessary and the following day healing had usually occurred.

I have had only one experience with freezing of the cornea. This was in a case of buphthalmos, and the eye was lost with a panophthalmitis.

I have had one experience with embalmers cavity fluid. This is 40 per cent formalin with phenol. The bulb slipped off the trocar and squirted fluid in the undertaker's eye. I saw him about two hours after the injury and the lower two-thirds of the cornea had turned a porcelain color and the lower half of the bulbar conjunctivia stained with fluorescein. He was put on atropine and soothing bland ointment with a final result of 6/6 vision and a residual nebula below the anterior pole.

Ten per cent neutral ammonium tartrate has yielded some good results in our hands in lime burns, but at present we have a patient who will not tolerate its use. It must be remembered that this solution must be fresh and that no attempt should be made to keep a large stock solution. It must be discarded frequently and replaced even though not used.

I have been interested to look up the treatment of burns in the older text books of ophthalmology. We have gone far in the last 40 years, in fact we are now back to the treatment advocated 60 years ago. Angel in 1880 advocated gentle treatment, bland ointments, cold compresses and supportive measures. For chemical burns he advocated much the same treatment as we use today.

By the late 90's, warm wet packs, antiseptic irrigations, and pus and granulations growing through the gauze were in vogue.

In the next decade there was less interference with normal healing, but as new remedies were developed there was the same old temptation to try them with the same old results.

There was some interesting work done about 10 years ago using the sulphydral ion in the treatment of burns and ulcers. I do not know whether any work has been done on the eye using the sulphydral ion. If this has been tried and found wanting it is just another report that I have missed.

In closing I wish to commend Dr. Culler for his conservatism, his careful work and above all, his clear thinking.

Possibilities of Diagnostic Confusion

Between Neurosyphilis and Other Neurologic Conditions.

Acute syphilitic meningitis—Tuberculous meningitis, brain tumor, brain abscess, benign lymphocytic meningitis.

Late meningovascular neurosyphilis — Peripheral neuritis, subacute combined sclerosis (pernicious anemia), acute or chronic anterior poliomyelitis, disseminated sclerosis, brain tumor, amyotrophic lateral sclerosis, syringomyelia, epidemic encephalitis, Bell's palsy, migraine, cord tumor, post-diphtheritic paralysis, chronic alcoholism, cerebral vascular accident, paralysis agitans, cerebral arteriosclerosis, epilepsy.

Tabes dorsalis—Lesions of peripheral sensory nerves, tumors or chronic sclerosis of posterior columns, subacute combined sclerosis, vestibular ataxia, hereditary ataxia, brain tumor (optic atrophy), Leber's disease (optic atrophy), retrobulbar neuritis (optic atrophy), hypertrophic arthritis (Charcot joint), syringomyelia (Charcot joint), diabetic pseudotabes, infected callus of soles (malum perforans).

General paresis—Neurathenia, psychoneuroses, hysteria, simple depressions, manic depressive insanity, schizophrenia, brain tumor (frontal lobe), cerebral arteriosclerosis, chronic acoholism, epidemic encephalitis, lead encephalopathy, uremia, epilepsy.

Do a blood serologic test.

When positive (or when negative, if history and physical findings are suggestive), also examine the cerebrospinal fluid.

THE 10 BASIC CHARACTERISTICS OF LATE SYPHILIDES

1. Solitary or few lesions.
2. Asymmetry.
3. Induration; deep palpable infiltration.
4. Indolence; low-grade inflammatory process.
5. Arciform polycyclic borders forming segments of circles, both in individual lesion and in configuration of groups.
6. Sharp margination; "punched out" ulcers.
7. Tissue destruction and replacement with or without ulceration.
8. Central or one-sided healing with peripheral extension.
9. Superficial, atrophic, noncontractile scar with arciform configuration of original lesion.
10. Persistent peripheral hyperpigmentation.

—Supplement No. 5. Venereal Disease Inf., U. S. P. H. S.

HYPOPHYSEAL CACHEXIA (SIMMOND'S DISEASE)

A Report of Two Cases with Autopsy Findings

By MEL A. DAVIS, M.D., Painesville, Ohio and BEATRICE POSTLE, M.D., Columbus, Ohio

HYPOPHYSEAL Cachexia, or Simond's Disease, is the clinical syndrome resulting from destruction of the anterior lobe of the pituitary gland. It is characterized by an extreme emaciation and by the appearance of premature senility. It is usually accompanied by symptoms of psychic disturbance.

Cases of extreme emaciation are not frequently seen, but when encountered, the differential diagnosis must include hypophyseal cachexia.

The entity was noted by Paulesco,[1] as early as 1907, following removal of the hypophysis cerebri, but it was not until 1914 that Simmonds,[2] recognized that atrophy of the anterior lobe of the hypophysis was the primary etiological factor.

In 1932, Royal M. Calder,[3] collected 70 cases from the literature. In 1933, S. Silver,[4] accepted only 41 of previously reported cases confirmed by autopsy findings as true cases of Simmond's Disease. In 1935, A. Weinsten,[5] made the statement that there had been but seven cases reported in the English literature, and of these seven, there were autopsy reports on three.

Since S. Silver's,[4] comprehensive report in 1933, there have been at least 40 more cases reported, and at least 17 of these have been accompanied by autopsy reports. Since Silver's report, the following have made contributions to the literature of Simmond's Disease:—Graham and Farquharson,[6] McLean,[7] Calder,[8] Zondek and Koehler,[9] McGovern,[10] Kylin,[11, 12, 13, 14] Spaar, [15] Lucacer,[16] Nürnberger,[17] Fink,[18] Brougher,[19] Bratton and Field,[20] Atkin and Russell,[21] Hantschmann,[22] Hawkinson,[23] Gunther and Courville,[24] May and Robert,[25] Vannucci,[26] Stewart,[27] Rose and Weinstein,[28] Moehlig,[29] Howard and Rhea,[30] Hicks and Hone,[31] de Gennes, Delarue and Rogè,[32] Dunn,[33] Boom,[34] Haverkorn,[35] Gallavan and Steegman,[36] Green,[37] Baltzan,[38] Herman,[39] Selander,[40] Hurthle,[41] Riecker and Curtis,[42] and Regester and Cutt.[43].

The pathology is, without exception, destruction of the anterior lobe of the pituitary gland, associated with atrophy and fibrosis of all viscera, especially the thyroid, gonadal, and adrenal glands.

Anything which causes a destruction of the anterior pituitary may be an etiological factor. The following may operate in such a manner as to bring about this pathology: Tumor or cyst of the gland itself, or tumor or cyst of adjacent structures compressing it; tuberculous and syphilitic infections; embolic or thrombotic occlusion of the arteries supplying the hypophysis; simple fibrosis; functional exhaustion.

The disease occurs in both males and females, but is most common in women in the age group from the fourth to sixth decades. It has been reported in individuals aged nine to sixty-four.

The process is insidious in onset, may progress rapidly, or may last as long as 44 years[5]. Emaciation is the outstanding finding, and a loss of 40 to 60 per cent of body weight is common. The patient is listless, apathetic, and appears prematurely senile; this effect is heightened by premature loss of hair, dry, wrinkled skin, atrophy of the lower jaw and loss of teeth without evidence of caries. There are signs and symptoms of gonadal atrophy; loss of libido, impotence and amenorrhea. The temperature is usually subnormal, the basal metabolic rate is very low, and there is hypotension. General weakness and atony are prominent features, and there is a disturbance of sugar metabolism. Bradycardia and headache are common, and anemia is a constant finding. There may be gastro-intestinal symptoms such as nausea, vomiting, and constipation or diarrhea. The patient usually undergoes psychic alterations. He may be only dull and apathetic, or he may have gross delusions, be delirious, or present symptoms of Korsakoff's psychosis. Recurrent attacks of hypoglycemia may produce symptoms closely resembling hysteria,[12].

Spontaneous remission and recovery are said to occur but these are difficult to correlate with the pathology. The prognosis is usually poor.

Not all of the above symptoms may be present in any one case, but if a considerable number of them exist and if certain other conditions can be ruled out, Simmond's disease should be considered. To be considered in the differential diagnosis are the following: The cachexias of some cases of arteriosclerosis, syphilis, neoplastic dis-

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The Authors

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ease and latent tuberculosis infection; Addison's disease, pluriglandular sclerosis; chronic infection of obscure origin; and anorexia, with resulting emaciation, due to psychic alterations. Addison's disease and pluriglandular sclerosis offer the most difficulties in differentiation. Many of the symptoms of these diseases are much the same as those of Simmond's Disease. Marked pigmentation of the skin does not occur as frequently in Simmond's disease as it does in Addison's, but it does occur occasionally. Zondek,[44] states that pellagroid rashes and dirty brown pigmentation, like chloasma, have been described, but that he has not seen them. The presence of pigmentation of the skin in Simmond's disease cannot be considered an unusual or not-to-be expected finding considering the fact that there is diminished adrenal functioning in probably all cases. (Corticotrophic hormone of the anterior pituitary lobe). One author,[45] states that cachexia is more pronounced in Simmond's disease than in Addison's disease. Practically the only differentiation made between Simmond's disease and pluriglandular sclerosis is that in the latter there is a tendency for all of the glands to be involved more or less simultaneously or in rapid succession.

Occasionally in Simmond's disease, x-ray of the skull reveals a defect of the sella turcica and this may be of aid in the diagnosis. However, there are some cases which apparently cannot be differentiated with finality from some of the previously mentioned conditions, without autopsy.

In treatment, substitution (glandular) therapy seems a logical procedure. However, the reports are inconclusive. The following authors report good results with anterior lobe extracts



Fig. 1. Gross photograph of pituitary showing cyst.

and anterior pituitary-like principle from pregnant urine: Hantschmann,[22] Lucacer,[16] Green,[37] McGovern,[10] Zondek and Koehler,[9] Calder,[8] Hawkinson,[23] Hurthle,[41] Herman,[39] and Dunn,[33]. On the other hand, the following have reported failures from endocrine therapy: Moehlig,[29] Farquharson and Graham,[6] and Regester and Cuttle,[43]. Kylin,[13, 14] claims to have successfully treated, with pituitary transplants from animals, 38 cases. Novak,[46] states that the results of treatment with anterior pituitary substance have not been striking.

CASE REPORTS

Case 1. A. M., white female, age 59, was admitted to Columbus State Hospital, Columbus, Ohio, September 10, 1935. There was nothing significant in the family history. She had never married; had lived with her parents until they died at advanced ages. After that, she had lived with her sister, who was also a spinster. She was of average intelligence; had held various positions as sales lady and as an attendant at an institution, and she had made a good social adjustment. There had been no previous serious illness.

Her final illness dated back for about one year previous to her admission to the Columbus State Hospital. The illness began with gastro-intestinal disturbances, especially nausea and diarrhea. She soon began losing weight and strength. About two months after the onset of the illness, a bronzed, scaly, thickened condition of the skin began to develop. She weighed 140 pounds at the beginning of her illness, and 65 pounds at the time of her admission to the hospital. She did not complain much, only occasionally of general aching and nausea. Throughout the duration of her illness she had nausea, vomiting and diarrhea. Her mental illness began in April, 1935, or about five months previous to her admission to the hospital. She became restless, confused, and had auditory and visual hallucinations.

When admitted to the hospital, she was extremely cachetic. Her skin was dark and scaly. The blood-pressure was 98/60. There was nothing else of significance revealed by the physical examination. Laboratory examinations were as follows: Erythrocytes 2,020,000; leucocytes 10,800; hemoglobin 48 per cent; color index 1.2; differential count of leucocytes, normal. Subsequent blood counts showed slightly fewer erythrocytes and a lower hemoglobin, in spite of intensive liver and iron therapy. Urinalysis and blood Wasserman were negative.

While in the hospital she gradually failed physically, and she died November 26, 1935. She did not have any elevation of temperature at any time while in the hospital. On the contrary, her temperature frequently dropped below normal and the tendency was for it to be subnormal. During the last two or three weeks of her illness it ranged from 94.2° to 97° rectally. There was also a tendency for the pulse to be slow. Her mental condition was one of delirium with anxiety, restlessness, delusions and hallucinations.

The diagnosis was not made before autopsy was performed. Various things were considered. These included intra-abdominal malignancy, Addison's Disease, and pellagra.

The autopsy was performed by Dr. H. B. Davidson. A summary of the findings follows:

Investigation of the body disclosed emaciation, a brownish scaly skin, scant axillary hair, and brown atrophic skeletal muscle. Examination of the thoracic organs showed the lungs to be normal; the heart was small and presented serous atrophy. The abdominal viscera were not remarkable grossly except for atrophy and fibrosis of the ovaries. Examination of the head showed

nothing remarkable in the brain. The pituitary contained a cyst lying in the posterior portion and compressing the anterior lobe. (Plate I).

The following positive findings were noted microscopically: The pituitary contains a cyst lying in the pars intermedia and posterior lobe; the anterior lobe shows a decrease in the number of secretory cells and a marked increase in the fibrous tissue. The thyroid is composed of atrophic inactive appearing acini supported by an increased amount of stroma. The adrenals present marked atrophy of cortex and medulla, accompanied by a great increase in fibrous tissue.

The pancreas discloses a definite increase in the number of Islands of Langerhans. The kidneys present a peculiar atrophy and dilatation of tubules which does not appear to be the result of either vascular or glomerular disease. The spleen shows a decrease of pulp with marked condensation of trabeculae and blood vessels. The ovary consists entirely of dense stroma, the walls of its blood vessels are thick, and it shows no evidence of secretory activity. The uterine endrometrium is markedly atrophic, and in addition presents caseous tuberculosis. The fallopian tubes also show tuberculosis. The bone marrow is normal in appearance. Sections of brain show a decrease in the number and size of certical nerve cells, and vacuolization of fiber tracts.

Case No. 2. (Fig. 2.) This patient was 17 years old, white male idiot, the seventh of nine children, born to parents of average mental ability. He developed slowly, did not walk until the age of two years, when it was discovered that he had a left-sided paralysis. He had measles and pertussis prior to admission to the Institu-

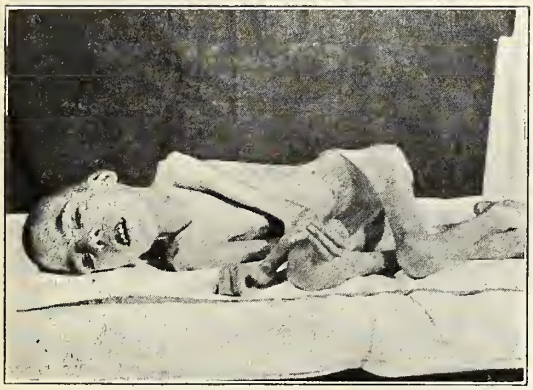


Fig. 2. Case No. 2.

tion for Feeble-Minded, Orient, Ohio, at age of six years, at which time he was "moderately emaciated."

An attempt was made to establish the child in a regular cottage but he was so helpless it was necessary to confine him to a ward for crippled patients where he remained bed-ridden.

In February, 1937, he became acutely ill. Physical examination showed a 17-year old male idiot, markedly emaciated, weighing not more than 25 pounds. T-98.8, R-38, P-144, B. P. 80/60. There were numerous well-healed traumatic scars on the scalp. Eyes, ears, nose, throat and neck revealed no marked abnormalities. The mouth was clean, the teeth in fair condition. Scattered over both lung fields were many fine rales, but there was no evidnce of consolidation. Examination of the heart revealed no abnormalities aside from tachycardia. The abdomen was not remarkable. Neither testis could be found. The penis was small, and there was no pubic hair. All four extremities were paralyzed, and fixed in a position of flexion.

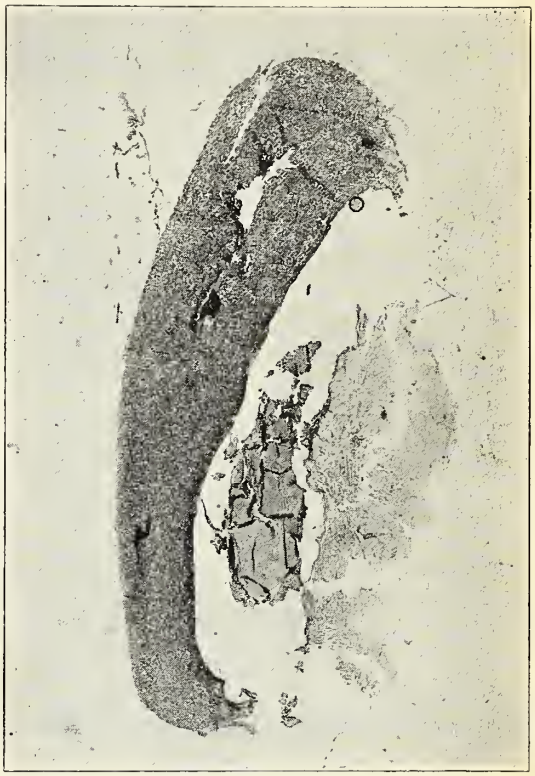


Fig. 3. Portion of pituitary showing cyst and atrophy of anterior lobe.

The patient died twelve hours later with a clinical diagnosis of bronchiolitis.

The following autopsy was performed by Dr. H. B. Davidson. A summary of the findings follow:

Investigation of the body showed what appeared to be a poorly developed and extremely emaciated male of eight or nine years. The external genitalia were infantile, and the testes were in the inguinal canals. There was marked atrophy of both fat and muscle.

Inspection of the thoracic organs showed the lungs to present the usual picture of influenzal pneumonia; the heart was not remarkable.

In the abdomen it was noted that there was an apparent fibrosis of the spleen, and that the prostate was small and undeveloped. The organs of the chest and abdomen were normal in size for an individual of the stature and weight of the patient, but was extremely small for a 17-year old boy.

The brain showed some atrophy of convolution. The pituitary contained a cyst lying in the pars intermedia and compressing the anterior lobe. (Fig. 3.)

The following are positive microscopic findings: The pituitary contains a large cyst lying in the

pars intermedia and markedly compressing the anterior lobe. The cyst is filled with colloid. The thyroid acini are small, livid with inactive epithelium, and supported by considerable fibrous tissue. There is atrophy of adrenal, cortex, and medulla with only slight increase in fibrous

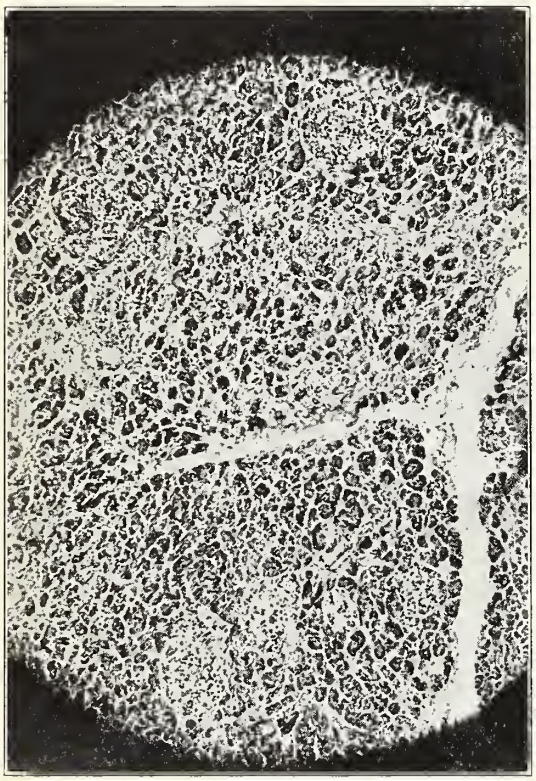


Fig. 4. Microphotograph of pancreas showing at least six Islands of Langerhans.

tissue. The pancreas contains an (Fig. 4) apparently increased number of Islands of Langerhans. The kidneys show a patchy tubular atrophy and dilatation which cannot be accounted for on the basis of vascular or glomerular disease. The spleen shows a decreased prominence of malphigian bodies and a condensation of trabeculae. The testes are completely undeveloped and consist only of rudimentary tubules, similar to those normally seen in the epididymis. The cortex of the brain presents definite degeneration of nerve cells accompanied by an increase in glial tissue. Sections of spinal cord contain many amyloid bodies.

COMMENT

We believe that the pathological findings at autopsy of these two cases, correlated with the clinical symtomatology, justify the diagnosis of Simmond's disease.

One of our cases, (A.M.) showed as a prominent symptom a bronzed, scaly, thickened condition of the skin. This pigmentation is not common but does occur.

It is unfortunate that no studies of the blood sugar are available in either of our cases since the pathologist found an increase in the number of the Islands of Langerhans in both cases, and since a disturbance of glucose metabolism is frequently found in cases of pituitary cachexia.

SUMMARY

Two cases of hypophyseal cachexia (Simmond's Disease) are reported with autopsy findings. In both cases pituitary cysts were found.

The pathology of this disease is destruction of the anterior lobe of the hypophysis, associated with atrophy and fibrosis of all viscera. The symptoms are due to a general lowering of all bodily functions—a hypo-metabolism.

It would seem that the logical treatment would be substitution therapy; that is, the administration of anterior pituitary preparations and other endocrine extracts. There is no unanimity of opinion, however, that such treatment is efficacious.

In cases of cachexia of obscure origin, Simmond's Disease should be considered.

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DISCUSSION

R. C. Kirk, M.D., Columbus, Ohio: It has been a great privilege to listen to the excellent presentation by Dr. Davis of two cases with autopsy reports, which constitute the seventieth and seventy-first recorded cases in the world literature since Simmonds first described this condition in 1914. I should like to emphasize one disease in the differential diagnosis which should always be kept in mind, inasmuch as its prognosis is very good whereas the similarity of the two conditions is very great. I am referrng to anorexia nervosa or Gull's disease. The first recorded instances of this disease were reported by Sir William Gull in the transactions of the Clinical Society of London in 1874. At that time he wrote of three cases of tremendous weight loss, excessive fatigability and amenorrhea occurring in girls, fifteen, seventeen and eighteen years of age respectively. He very modestly took no credit for their complete recovery, except to say that he bent every effort to build up their appetites and to restore them to a normal attitude toward their surroundings. In 1930, Dr. Venable of Canada reported nine similar cases including three in boys, and gave them the name anorexia nervosa, all of whom recovered. It was my privilege to review six cases seen in the New York Hospital which were diagnosed originally as Simmond's disease because of the findings of anorexia, excessive weight loss, menstrual changes, low basal metabolic rates and marked asthenia. Because of the subsequent recovery of five of them with death and autopsy of one who showed no pituitary changes, these cases were reported as cases of anorexia nervosa by Dr. Richardson at the Association of American Physicians Annual Meeting in Atlantic City, 1936. It seems of particular interest to emphasize these cases before this meeting of neuropsychiatrists because it is emphasized by all of these physicians that psychotherapy seems to be of considerable therapeutic importance. Certainly the careful differential between these two diseases should always be made.

Tetanus Antitoxin

In a group of 1,000 persons treated with prophylactic injections of different lots of New York State tetanus antitoxin, 15.2 per cent developed generalized serum reactions, 3.5 per cent within twenty-four hours. Only a fourth of the reactions could be designated as severe and two as possibly alarming. Localized reactions of minor significance were noted in an additional 12.5 per cent of the patients.

In general, the incidence of the reactions tended to decrease with the increase in potency of the antitoxin and the coincident drop in the protein content of the prophylactic dose. Repurification of the antitoxin had no appreciable effect.

A consistently downward trend was observed in the relative frequency of general reactions in the age groups up to forty years. Undoubtedly the chief factor influencing the higher percentages in the younger groups was the greater number of persons who, according to the records, had previously received injections of horse-serum products.

Diphtheria toxin-antitoxin mixture apparently played an important role in sensitizing individuals to later injections of tetanus antitoxin.—Harold W. Lyall, Ph.D. and Philip P. Murdick, B.S., Albany; N. Y. State Jr. of Med., Vol. 38, No. 11, June, 1938.

ACUTE INTESTINAL OBSTRUCTION

By B. H. NICHOLS, M.D., Cleveland, Ohio

AN acutely ill farmer, 33 years of age, was admitted to the Cleveland Clinic Hospital on July 14, 1937. The following history was obtained: The appendix had been removed one year prior to entrance and drainage had been necessary. Nine days previous to admittance some abdominal pain had occurred but this soon disappeared. Seven days later, however, severe epigastric pain developed and the patient went to bed. The pain was constant and acute and became generalized over the entire abdomen after the first few hours. On the day before admittance, however, the pain became more severe in the lower abdomen and was of about equal intensity on both sides, but it was not cramping or intermittent at any time. Vomiting occurred six or more times during this period, the vomitus consisting of a dark fluid almost as dark as coffee grounds and the quantity was about one pint each time. In spite of enemas there had been no bowel movements since two days before entrance; no gas had been passed.

Examination revealed that the abdomen was not distended but the intestinal pattern was visible and palpable. There was a scar in the region of the right rectus muscle. No jaundice or symptoms of disease of the urinary tract were elicited. Liver dullness was obliterated.

Examination of the blood showed 4,900,000 red cells, 8,000 white cells, and 84 per cent hemoglobin. The temperature was 101.3° F., the pulse rate 100, and respirations 22. Examination of the urine showed a specific gravity of 1.032 with no albumin or sugar. The level of the blood urea was 54 and of the blood chlorides 346 mg. per 100 c.c.

Roentgen examination of the abdomen showed the lumbosacral region to be normal. (Fig. 1). There was marked distention of the small intestine, apparently due to obstruction in the ileum. By placing the patient in the upright position, considerable fluid was visualized in the distended loops of the bowel. (Fig. 2). Plain films of the gallbladder showed no evidence of gallstones.

The impression of the examiner was that the symptoms were caused by intestinal obstruction.

The patient received intravenously 6000 c.c. of 5 per cent solution of glucose in saline, alternating each 1000 c.c. with distilled water. On the second day in the hospital, an exploratory operation was performed by Dr. T. E. Jones. Under spinal anesthesia, a lower right rectus muscle splitting incision was made and the peritoneal cavity was opened. Approximately 1500 c.c. of straw colored fluid was present in the peritoneal cavity and the small bowel was greatly distended. The collapsed ileum was located and followed upward to a point about 36 inches from the ileocecal valve where the omentum had become adherent to the ileum and by retraction had produced a sharp angulation above which the bowel was distended and below it was collapsed. There was no discoloration of the bowel at this point. The band which was producing the obstruction was liberated and the intestine below was seen to fill well. Since the obstruction apparently was completely relieved, the bowel was not opened.

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The peritoneum was closed with continuous catgut sutures, interrupted alloy steel sutures were used in the fascia, and clips to the skin.

On the day following the operation, pitressin was given which caused the passing of flatus per rectum. Interrupted gastric suction was prescribed and by the fourth day the patient was progressing satisfactorily, and intravenous fluids were stopped as adequate fluids were being taken by mouth. Improvement continued and the patient was in splendid condition when he was discharged on the seventeenth postoperative day.

DISCUSSION

Acute intestinal obstruction does not indicate a definite diagnosis or point to any definite therapeutic procedures, but it is rather a condition which may be produced by many causes. Unfortunately, it is not usually easy to establish the diagnosis in this condition and too often specific treatment is delayed until the classical picture appears. The mortality is between 40 and 50 per cent and if this is to be reduced, earlier recognition of the condition is essential.

Acute intestinal obstruction may be divided into the following four groups:[1] (1) Simple obstruction of the bowel produced by a large gallstone, foreign bodies, and many times by adhesions; (2) obstruction caused by strangulation in which the vascular supply of the bowel is disturbed; (3) high obstruction; and (4) low obstruction. From a diagnostic standpoint, at least, it is essential that the last two types be differentiated.

Simple obstruction: In the simple obstruction there is interference with the passage of the contents of the bowel and distention occurs which is rapidly followed by the accumulations of gas and metabolites in the distended bowel. Then comes emesis and dehydration. The chemistry of intestinal obstruction has been investigated by Tilleston[2], Whipple[3], Stone[4], Felson[5], and Haden and Orr[6]. The work of these men has made possible the understanding of the physiological chemistry involved in intestinal obstruction. Felson's[5] work on simple mechanical obstruction has

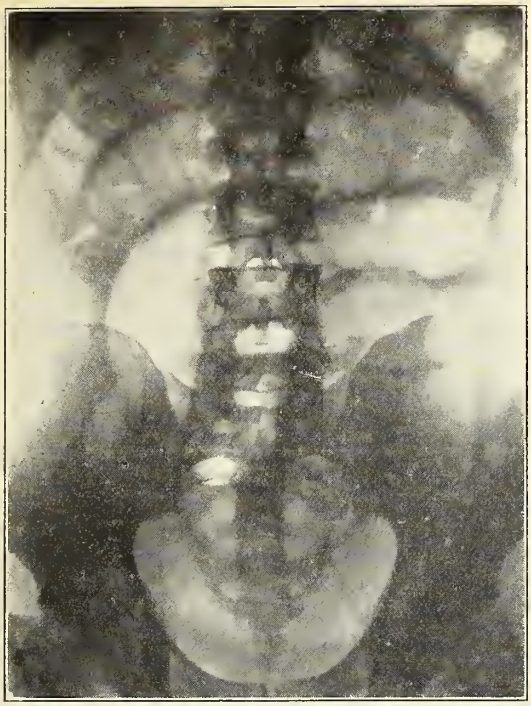


Fig. 1.



Fig. 2.

shown that death is not due to toxemia but to starvation, dehydration, and reduction in the chlorides of the blood. It is evident then that treatment of this particular type must be directed toward preservation of the salt and water balance, together with maintenance of nutritional factors which will carry these patients a long time unless there is a degree of starvation incompatible to life. With this in mind, an attempt at physiological adjustments is the essential factor in the preoperative management of simple obstructions as it is evident that the vast majority of all these lesions present problems in surgery.

Obstruction with strangulation: In the second type, with acute strangulation caused by volvulus, intussusception, strangulated hernia, or twists and kinks of the intestine, the lethal factor is toxemia, and death may occur in a very few days.

Obstruction high in the intestine: The pathologic physiology of obstruction high in the intestine consists of vigorous peristaltic contractions which produce cramps in the abdomen due to stimulation of the sensory nerves. The tension increases in the bowel which becomes distended, the vicious cycle being augmented by marked increase of secretions. The tone of the pyloric sphincter is reduced and there is a reversed peristalsis with regurgitation of the intestinal contents into the stomach, so that pain, nausea, and vomiting are very early symptoms, together with hiccough which persists in spite of all remedial measures. The first vomitus consists of the contents of the stomach and later it contains bile and subsequently fecal matter.

Orr[7] has recently pointed out that one of the factors contributing to rapid dehydration and loss of chlorides is that this barrier between the upper secreting and lower absorbing areas of the intestine is abruptly interrupted. He chooses to call this the intestinal circulation. The loss of fluids may be evidenced by vomiting or they may accumulate in the upper part of the coils of the intestine and in the stomach. Wilkie[8] reports an experimental study on a dog with complete obstruction. By the introduction of fluids and chlorides below the obstruction the animal lived 50 days. It was shown that large quantities of fluids may be required to maintain life. Maury[9] has shown that the nearer the obstruction is to the opening of the pancreatic and common bile ducts, the earlier the onset of symptoms of toxemia and death.

Haden and Orr[6] advocated the administration of one gram of sodium chloride per kilogram of body weight as an initial dose followed by maintenance doses sufficient to keep the chlorides of the blood and urine normal. The development of alkalosis due to the loss of chlorine ions gives rise to hyperexcitability, tremors, twitching, and even tetany. There is an increase in urea nitrogen and nonprotein nitrogen content which cannot be explained on the basis of renal disease, as the phenolsulphonphthalein test reveals the kidney to have unimpaired renal function. The ex-

planation of this probably lies in the destruction of stored or tissue proteins by the action of the toxic substance as described by Whipple[3].

ADYNAMIC ILEUS

Often following diffuse peritonitis, following acute appendicitis, or following a clean operation or trauma, an apparent obstruction occurs with distention of the intestine and obstipation. There is repeated regurgitant vomiting, increasing rapidity of the pulse, and dehydration. There is no pain, and on auscultation the abdomen is quiet. This sign is important in complete obstruction and may be a criterion as to when complete obstruction occurs. Intubation of the intestine with continuous drainage should be started at once. Continuous intravenous infusion of saline solution, heat to the abdomen, and morphine should be given. If the condition does not subside, a spinal anesthesia or injection of pituitrin should be tried. The method introduced by Fine[10] is often useful. It consists in placing the patient's head in a small oxygen chamber, thus reducing the nitrogen tension in the blood by absorbing that gas from the intestine, reducing the tension and improving the circulation, and forcing peristaltic action. Operation is of no value in this condition.

ROENTGEN EXAMINATION

Perhaps the most important factor in the diagnosis of acute intestinal obstruction is the roentgen examination which has undergone much improvement in the past few years. The group of workers at the University of Pennsylvania have made possible a better understanding of the roentgen interpretation of lesions in the small intestine, while many workers, among them Doctor Golden of New York, have been able to demonstrate the presence of sarcoma and other lesions in the bowel. However, the first and most important procedure in the presence of symptoms suggesting acute intestinal obstruction is to make plain films of the abdomen, taken with the patient in both the horizontal and upright positions. These films will usually show the distended loops of the bowel in the horizontal position, and in the upright position fluid levels in the lower portion of the distended loops will be seen.

An experimental study of the particular character of the distended loops of bowel has been conducted at the University of Kansas by Doctor Dann[11]. He has shown that a distended loop of the large bowel shows a v-shaped indentation involving the outer wall of the gut in the peripheral attachment of the haustra. This gives an irregular outline of the exterior lumen with a v-shaped indentation on the exterior surface. A similar distention of the jejunum, for instance, produces a smooth, regular, outer delineation with the v-shaped deformities on the interior side of the bowel, leaving the outer wall smooth. This makes it possible in many instances to definitely determine the portion of gut which is distended and give much aid in the location of the point of obstruction.

It never has been our policy to administer barium orally to patients with obstruction for the reason that it will not pass to the point of obstruction, may only confuse the picture, and the barium-filled gut handicaps the patient at the time of operation. Recently, however, Doctor Osler Abbott[12] of the University of Pennsylvania reports the use of a very long intubation tube which will pass in the small intestine to the ileocecal valve if the obstruction is below that point. However, when this tube reaches the point of obstruction, in addition to its value in decompressing the bowel in instituting continuous drainage, a small amount of barium may be injected through it and a subsequent film identify the obstruction. The introduction of barium from below, however, by means of an enema is always permissible and may be of considerable value, particularly in the low obstructions.

Dr. Max Thorek[1] of Chicago reported at the International Congress of Gastro-Enterologists in Paris that, at the Cook County Hospital in Chicago, they had received much help from the injection of fluid per rectum. He stated that if the bowel held two quarts of fluid without particularly distressing the patient, the obstruction was usually found in the small intestine. This same principle may easily be applied by a two quart barium enema. This method is of value only in the presence of complete obstruction.

We feel that careful roentgen examination will help the surgeon to determine the character and location of the intestinal obstruction although experience in the diagnosis and treatment of intestinal obstruction is probably the most important factor.

EUCLID AVE. AT NINETY-THIRD ST.

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PLACE OF THE HOSPITAL IN MATERNAL WELFARE

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IN recent years there has been a progressive increase in hospitalization of maternity cases. While this change from the older custom of home deliveries has occurred to a larger degree in cities, a similar change has been noted also in rural areas. In Philadelphia, hospital deliveries increased from 30 per cent of all births in 1921 to 83 per cent in 1937. Comparable increases in hospital deliveries have been observed in other large cities. In 1935 in the State of Washington, 85.1 per cent of all urban births occurred in hospitals; in Oregon the percentage was 88.7, in Minnesota 85.2 and in the State of New York 81.8. For the same year the hospital deliveries in rural areas were 31.6 per cent in the State of Washington, 37.8 per cent in Oregon, 27.9 per cent in Minnesota and 34.7 per cent in the State of New York. In urban areas of the United States in 1936, 72 per cent of births occurred in hospitals; in rural areas in the same year 14 per cent of the births occurred in hospitals.

Why is the hospital supplanting the home as the place of delivery? Probably because the people as a whole have become more hospital conscious, not only in cities but also in rural areas. To quote MacEachern, "The modern hospital has actually become a part and parcel of the social life of our American people, using this term in the continental sense." Due to the education of the public in health matters, the hospital is being regarded as a safer place for the mother to have her baby.

Other factors influencing hospitalization of maternity patients might include the prevalence of good roads and almost universal automotive transportation; greater convenience to physicians in caring for labor cases in hospitals; and the economic status of the patient, especially of the ward class. Such patients are better able to rent the facilities of the hospital than to pay for poor substitutes at home where limited space and equipment often render confinement unsuitable.

INCREASED HOSPITALIZATION OF MATERNITY PATIENTS

Since increasing numbers of maternity patients are being delivered in hospitals it is necessary to inquire "Is the hospital safer than the home?" One of the planks in the platform of the Hospital Obstetric Society of Ohio pledges every effort to secure as nearly complete hospitalization of maternity cases as the facilities and conditions of individual communities will permit, therefore it becomes imperative that the question should be answered in the affirmative. It has been stated often that a first class hospital is an advantage to a patient but that those not conforming to the highest standards are a menace. As judicious selection of a hospital is important the community should know the standards of the hospitals offering maternity care. "The education of the public as to the need for hospital standards; what they are, how they protect human life, and how they promote safer and more adequate care of the sick and injured, can be furnished", states MacEachern, "through a program of public relations."

If we turn to the statistics to determine relative safety of hospital or home as a place of delivery we enter a highly debatable field. Both the New York and Philadelphia reports on maternal mortality yield identical figures. Each gave the hospital death rate as 4.5 per thousand live births as compared with the home rate of 1.8. Neither report, however, attempted to give corrected mortality rates by excluding emergency admissions. In contrast to this, Irving states that the maternal death rate in Massachusetts in 1934 and 1935, was 4.6 for hospital cases while the home rate was 5.5 per thousand live births.

There are many factors that promote for greater safety of the patient in the hospitals. The ability of the physician to conduct a more nearly perfect aseptic delivery in the hospital than in the home; the fact that transfusion is more quickly available in the hospital; in so far as toxemia is concerned, medical treatment, nursing care and laboratory studies are easier to obtain; and where operative delivery is indicated qualified assistance and consultation is more readily obtained in the hospital.

RELATIVE SAFETY OF HOSPITAL DELIVERIES

Some years ago two of our foremost obstetricians, De Lee and Whitridge Williams, argued the question of the relative safety of the hospital

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in maternity practice. This discussion led to the formulation of a number of obligations and qualifications which today are agreed as necessary to insure the safety of the patient in a maternity hospital. The American College of Surgeons requires the observance of the following standards for approval for hospitals taking obstetric patients:

1. Segregation of obstetric patients from all others in the institution.

2. Special facilities available for immediate segregation and isolation of all cases in infection, temperature, or other conditions inimical to the safety and welfare of patients within the department.

3. Adequately trained personnel, the entire nursing staff to be chosen specially for work in this department and not permitted to attend other cases during time on obstetric service.

4. Readily available, adequate laboratory and special treatment facilities under competent supervision.

5. Accurate and complete clinical records on all obstetric patients.

6. Frequent consultations encouraged on obstetric service, a consultation made obligatory in all cases where major operative procedures may be indicated.

7. Thorough analysis and review of the clinical work of the department each month by the medical staff with particular considerations to deaths, infections, complications, or such conditions as are not conducive to the best end results.

8. Adequate theoretical instruction and practical experience for student nurses in prenatal, parturient, and postpartum care of the patient, as well as the care of the newborn.

The responsibility for making our hospitals suitable and safe for the care of maternity patients belongs in part to the various directing boards, trustees, managers or overseers, regardless of whether the hospital is a municipal institution, a general voluntary organization or a limited obstetrical unit. For the privately conducted or proprietary hospital there seems to be no individual other than the proprietor who is ultimately responsible unless inspection and approval is provided by local Boards of Health.

The first responsibility of the governing body of a hospital is the provision of a proper building or unit to include accommodations necessary for both public or ward and private patients. The growing tendency to hospitalize prenatal cases for observation and study necessitates an allowance of beds, etsimated at 5 per cent, for such antenatal cases. Presumably toxic cases comprise a large proportion of these prenatal patients admitted for study. Similarly we hospitalize prenatal cases with medical complications such as cardiac lesions, and those having obstetric complications including hemorrhage, previous Cesarean sections, earlier difficult vaginal deliveries or previous still-births.

If we agree that patients at term should be hospitalized, we should require the same degree of care for women whose pregnancies terminate prematurely or before viability. These cases constitute a further demand for hospital space. The frequency of abortions has been estimated as one to every five deliveries near term. Since the incidence of septic infection is so much greater in this class of cases than in pregnancies ending near term, separate space must be reserved for their care away from the regular maternity department.

Governing boards are further charged with the provision of proper equipment and maintenance of all divisions pertaining to the maternity service. This includes such diverse items as the prenatal clinic, labor, delivery and sterilizing rooms, the nurseries for full term and premature babies, and even an ambulance service.

The proper construction of the maternity hospital is the province of the architect and hospital consultant. To them the problems of proper arrangement of space, ventilation and lighting should be entrusted. To the administrative board, however, the question of proper sanitary precautions, and their enforcement, belongs. Of particular concern are the questions of water supply, waste disposal and the periodic examination of the sterilizers and sterile water tanks. The latter should be tested for sterility of contents by satisfactory bacteriological test, at least monthly. Those laymen, trustees or superintendents whose administrative efforts have directed our hospital system so successfully could have no better guide to the equipment and conduct of a maternity service than the recent authoritative publication of the American Hospital Association, "Manual of Obstetrical Practice in Hospitals."

PROPER ORGANIZATION OF STAFF

The next and possibly the greatest responsibility of a governing body is the selection of a qualified staff for the maternity department. If a hospital is to be the safest place for maternity patients, then the staff must be composed of physicians sufficiently competent and experienced to handle difficult and complicated cases. Adequate training and operative ability should be the requisites for such positions. The fact that a physician has a predilection for maternity work or that he can bring a large amount of work to the hospital should have no influence on the board in selecting a major staff. Qualifications similar to those required for certification as an obstetric specialist by such organizations as the American College of Surgeons or the American Board of Obstetrics and Gynecology should be demanded. When a limited degree of specialization must perforce suffice, the advice and recommendation of the staff members must guide the lay governing body in their selections.

To the staff should be assigned the responsi-

bility for the conduct of the antenatal and postnatal clinics and of the ward services. The important duty of case study and supervision of the prenatal clinic should not be relegated, as is so frequently done, to the youngest junior staff man. Upon the attending staff, also, rests the unwritten obligation of promoting the safety of the delivery of patients under the care of outside physicians. This entails consideration as to whether a maternity department should be open to a privileged group and, if so, what restrictions should be placed on this courtesy staff.

It is the further duty of the obstetrical staff to see that such associated branches of medicine as laboratory, X-ray, internal medicine, syphilology, surgery, pediatrics and dentistry are available on the general staff should consultation and assistance be required. A higher standard of obstetric practice can be attained where the resources of a general hospital and the services of a specialist staff, non-obstetric as well as obstetric, can be called upon at any moment. The department of anesthesia bears an important relationship to the factors of safety to the obstetric patient. The administering of an anesthetic for delivery demands special training, interest in the work and cooperation with the obstetrician. The haphazard administration of ether or other anesthetic agents by an unskilled person, chosen at random from force of circumstance or time does not add to the safety of the mother or child. Equally important is the necessity for providing equipment and trained personnel to care for premature infants if we are to reduce the high death rate in such cases.

CARE OF WARD PATIENTS

In the larger voluntary hospital providing a maternity service for public ward patients, the staff should take cognizance of the type of case admitted, both free or pay ward patients. As previously mentioned a definite element in the increasing hospitalization of obstetric cases in recent years at least in cities, has been economic circumstances. The staff in supervising the maternity department should insist that only suitable cases be admitted. A survey of the applicant should be made by a branch of the administrative division of the hospital or a recommendation should be submitted by an accredited individual or agency. Only in this manner can proper relationships be maintained between the hospital providing a ward service and the general practitioner doing obstetrical work in the community.

In their care of the ward patient, whether free or paid, the staff must provide medical care through instruction, examinations, consultations and treatment of intercurrent complications. They must also direct the prenatal clinic worker to follow up each case so as to assure the patient's regular attendance at clinic, to secure proper supervision of cases of toxemia or other complications, to stress the importance of such factors as hygiene, nutrition and habits and to observe post-natal conditions in either mother or child.

To the staff is delegated the conduct of the personnel necessary to the maternity division. Of the utmost importance is the limiting of contacts, personnel and visitors to the patient, in order to prevent cross infections. To this end there should be in addition to adequate isolation facilities for the infected mother or baby, a scrupulous regard to prevent infection being carried to the healthy puerperae and infants. No one engaged in caring for infective patients or with an upper respiratory or other infection or with recent contagious contacts should be permitted to enter, or remain on maternity duty until and unless they may be considered medically safe. An effective aseptic technic should be insisted upon, especially in the delivery rooms and nurseries.

The separation of infected mothers may be based upon a febrile standard, as well as upon outspoken evidence of such conditions as upper respiratory infections or gonorrhea. This separation may begin upon admission of an infected patient and continue through a separate delivery room and convalescence. If necessary, a separate delivery room for such a case may be improvised in an area apart from the regular service. Such infected area should later receive proper attention.

The tremendous value of blood transfusions in many obstetric emergencies should lead the staff to form a list of readily available donors. Where it is impractical for a single hospital to manage a blood bank, cooperation of several institutions might make such a supply available.

It is a responsibility of the staff to provide adequate means of resuscitation of the newborn and to know that such instruments and agents in good condition are always readily available in the delivery room.

The not infrequently reported, wrong child cases, should lead to the adoption of a foolproof method of identification of the newborn. The nursery should be conducted under a set up of sufficient technic to insure freedom of newborn infants from cross infections, of a respiratory, intestinal or dermal nature, and additional isolation, nursing and medical protection should be added for the benefit of the prematurely born infant.

Members of the obstetrical staff of a hospital should regard themselves as the teaching unit of the community. They should give instruction in obstetrics or maternal welfare to nurses, interns, residents, courtesy staff members, junior staff members, patients and husbands and families of patients. Some elements of this program of teaching must necessarily be planned. Much of

it, however, should become instinctively a part of the daily life of the obstetrical staff to be carried out at opportune times such as during ward rounds, while preparing records, or when conducting antenatal or postnatal clinics.

The interns and residents should be educated by means of demonstrations, supervision, and discussions. Some of the same methods would be beneficial to members of the resident or junior staff, but they should receive additional training so as to qualify them to assume increasing responsibility under modified supervision. Patients should be given individual instruction in the intimate details of hygiene and habits. This may be supplemented by classes on dietetics and baby care conducted by nursing supervisors. Well chosen literature should be given to patients such as that offered by many state medical societies and local health departments along the lines of the Children's Bureau publications on Prenatal Care. Talks on antenatal care and hygiene as well as on the care of the baby may be given at intervals to patients, their husbands and other members of their families.

The maternity division of a hospital should be open to ethical practitioners of the community. The existence of such a courtesy staff stimulates the major staff to act as a teaching unit. Because of the limited operative ability of some physicians and the greater experience of others, certain intra-mural regulations must be adopted to restrict and supervise the practice of courtesy and junior staff members. There should be also intra-mural teaching of those whose experience is limited. This involves certain basic rules of maternity practice.

POLICY RE NURSING CARE

The hospital should have a definite policy regarding medical and nursing care of the mother and baby and standing orders for technic of delivery. Such a policy should permit of deviation when necessary. Adherence to a simple yet rigid technic in the delivery room will lead physicians who use the hospital to a closer application of such principles in their home deliveries. Other items of importance that should be understood clearly by the infrequent courtesy staff member include limitations of the use of pituitary extract and making necessary vaginal examinations only under strict aseptic technic similar to that required for actual delivery.

Hospitals should require consultations in serious complications and in certain operative procedures, as mature judgment and wide experience are needed at all times in caring for maternity cases. Free discussion of the case will benefit not only the patient but also the attending physician and the consultant. Consultation should be required in all cases of severe toxemia, puerperal infections, hemorrhage and arrested or delayed labor for which an arbitrary time limit should be set.

Widespread adoption of compulsory consultation by hospital staffs would tend to lessen the unnecessarily high operative incidence in many obstetrical institutions. Among 21,095 births in 50 hospitals in New York City in 1933, 75 per cent were spontaneous deliveries and 25 per cent operative. In our Philadelphia survey 1931 to 1933, the hospitals reported 72 per cent spontaneous deliveries and 28 per cent operative. Why should these figures be reversed in some hospitals? Does a high operative incidence indicate better care of the obstetric patient?

Obstetrical staff conferences are essential and by a ruling of at least one medical organization, whose stamp of approval is a recognition of good hospital conduct, they are obligatory. Such conferences conducted in an impersonal manner with frank discussion serve as an educational center, not only for the junior staff but also for the courtesy members. A review of the cases showing febrile morbidity, often intimately related to septic infection, should provide a possibility of detecting unseen breaks in technic which at times prove fatal.

A review of the febrile cases alone does not completely evaluate the care of the parturient. A simultaneous review of physically morbid cases such as toxemia, hemorrhage, trauma, still-births and neonatal deaths as well as the medical and obstetrical complications of the antepartum and postpartum states, will disclose the commonly accepted treatment, and will offer an opportunity to discuss new plans of procedure and operation.

This subject of puerperal morbidity has recently been clarified by Ward and his associates. In one hospital, with which I am connected, the plan proposed by Ward was adopted for staff conferences. The morbidity rate as measured by febrile standards which had been 11 per cent had jumped to 35 per cent when the morbid processes and complications of the pregnancy, labor and puerperium were included.

Obstetric staff conferences should be held regularly at such intervals as the amount of work indicates. Attendance should be obligatory upon the regular staff and on the courtesy staff for case discussion. Clinical investigations should be undertaken by the staff, if sufficient material is available. Such surveys may take the form of clinical research or of analytical deduction from the material in the record room.

Possibly, no service of the hospital is in closer or more personal contact with the obstetric patient than the nursing department. The provision of this service and its part as a factor for the safety of the maternity patient, is a responsibility shared both by the governing body and the medical staff. The extent of the services will determine the need not only of supervisors and head

nurses, but also of instructresses, all of whom should be selected with care and discrimination. A practical help in caring for the occasional peak of obstetrical work or emergencies in hospital practice consists in the provision by the nursing school of immediately available nurses selected from uninfected hospital areas.

Theoretical instruction of the nurse is given by the medical staff, and practical aspects are provided by head nurses and instructresses. The teaching of nurses should ground them fully in the elements of practical obstetrics. Their education should include sufficient time in antenatal clinics to enable them, should they become public health nurses, to recognize abnormal symptoms, and to act as liaison officers, ensuring cooperation of patients, and securing, when necessary, earlier hospitalization in potentially dangerous conditions. As in the case of physicians, facilities should be provided for the further education of the nurse who wishes to specialize in obstetrics, whether institutional or private.

INTERN STAFF AN IMPORTANT FACTOR

The relationship of the intern staff to the hospital has been defined in recent years by local state boards of medical licensure, or similar bodies, acting as a sub-division of the State Department of Public Instruction or Education. These boards look upon the hospital intern year as one of instruction, which is obligatory before license is granted for the practice of medicine. Some boards are quite specific in their requirements for education in clinical obstetrics.

The intern staff is a most important cogwheel in the machinery of the hospital. In no place are good interns of greater value than in the maternity department, not only because he assists in the delivery and after-care of the private patients, but also because he must deliever most of the ward patients during his term of service. Although supervision of ward deliveries is recommended, it is frequently lacking, and the intern must, at times, assume full responsibility for the mother and infant. Under proper circumstances, as MacEeachern has stated, the intern should be encouraged to study and care for the ward patient as though the prime and sole responsibility were his alone. It devolves, therefore, upon the board of governors and the medical staff to select men who on personal interview and written examination show themselves to be suitable and capable.

Pennsylvania requires a rotating service in a hospital. In internships of only one year, the regulations call for a service of not less than six weeks in the maternity during which time the intern should be in attendance or participate in not less than six confinements. For the purpose of overseeing and instructing the intern, one of the physicians in attendance in this department should be present not only in complicated cases but also in a fair proportion of normal cases, especially when the intern is beginning his service. It is further required that the intern attend the prenatal clinic to examine the patients, report his findings and measurements and have them checked by the physician in charge. The intern must make regular postpartum visits and continue the records of the ante-natal and intrapartum period making a final notation upon discharge of the patient from the ward to the postnatal clinic. This affords him added instruction in any complications which may develop after the patient has left the hospital.

The supervision and instruction of the intern as required by statute in the fifth medical year, places further responsibility upon the staff, which they should accept gladly not only for the benefit of the present patient, but also for the intern's future practice. Frequently, because of scarcity of material or disinterest or oversight on the part of the attending staff, many interns leave the obstetrical service of a hospital poorly fitted to handle maternity work encountered by general practice. They lack confidence in themselves to make forceps application or manage other abnormal obstetric cases. Although one realizes it is impossible to make a specialist out of the ordinary intern in the allotted time of the average hospital, still there is room for marked improvement in the supervision and training of the obstetrical intern by the staff in many hospitals.

Opportunities for acquiring clinical experience in obstetrics under proper instruction are extremely limited not only in this country but also abroad, and the necessity for creating more and better facilities for training physicians and nurses in obstetrics is imperative.

The average time that an intern devotes to obstetrics in a rotating service is so short that unless a service is extremely busy, little abnormal work is seen. To further the training of interns and other physicians who wish to develop greater ability in obstetrical work, residencies in obstetrics should be provided in hospitals where material is more than ample for intern training. These residencies should be from six to twelve or more months in duration, in order that a man may be trained to become a limited or complete specialist in obstetrics, depending upon his needs or ambitions. Hospitals having 500 or more deliveries a year with an ample ward service should give serious consideration to the establishment of such a residency. This would help solve the problem of furnishing trained men for the maternity services of hospitals in smaller communities. Some of the Social Security funds designated for maternal welfare might well be utilized for the expenses of such residencies.

Beside intern training, the hospital is responsible for keeping proper records of the maternity

cases. Adequate records are valuable for reviewing cases, and for tabulating their results. Printed forms should be used covering necessary information as to antenatal, intrapartum and postnatal periods. These forms although simple should be comprehensive enough to contain essential information. The final records of discharged patients should be compiled to show results attained. Our hospital records provide a yardstick for measuring our ability as obstetricians, showing our judgment, our technic and our organization. Only by a study of them can we determine our true obstetric mortality and morbidity rates.

UNIFORM OBSTETRIC RECORDS ADVISABLE

It is advisable that obstetric records be made more nearly uniform. An annual report of all maternity services in this state made by such an organization as your Hospital Obstetric Society of Ohio furnishing statistical and practical deductions would be of tremendous value. The Maternal Welfare Commission of New Jersey has made such a report which has proved of great value in noting the changes in obstetric practice in various hospitals throughout the state.

The present trends in our economic, social and political spheres have given rise to certain conjectures regarding the future of the practice of medicine and the end probably has not been reached. Prominent among the numerous programs and plans offered concerning the influence of the state on medical and hospital practice has been consideration of the care and health of certain classes, notably those in the lower economic levels. Arguments have included the advantages and disadvantages of maternity benefits according to plans formulated in certain foreign countries.

Another interesting development has been provision of an insurance plan for hospitalization, to be taken by all classes. This includes, of course, hospitalization for maternity patients for delivery. Such plans should be examined very thoroughly from at least two angles. First, they should provide adequate remuneration for the hospital to insure proper care of the maternity patient. Second, they should preserve the existing relationship between physician and patient.

The hosiptal in the rural area may assume the added responsibility of providing prenatal care in the home. In cases where the patient lives at some distance from the hospital in whose clinic she has registered, visiting nursing service may be given by the hospital nurse or by associated public health nurses of the community or county. During her visits to the home such a nurse might ascertain blood pressure readings, collect specimens of the urine for examinations, or make simple examinations. In this way the comfort of the patient would be assured and her safety cared for. In some communities this program has been adopted and expanded in order that the visiting nurse may assist the private physician, at his request, both in prenatal work and at the time of delivery. Community hospitals might also furnish consultation services in difficult or abnormal home deliveries. They could send supplies, nurses, and qualified medical assistance to distant points by ambulance or motor car. Such consultation services might be enlarged further to include cooperation between city and rural hospitals. The more highly specialized staff of the larger city hospital might act as consultants for the smaller, rural institution which might not be so well equipped nor manned.

SUMMARY

In summary it may be stated that in both urban and rural areas there is an evident increase in hospitalization of maternity cases.

If this trend is because the hospital is a safer place for delivery than the home, then we must insure the truth of that belief.

We can do this by proper isolation of the maternity department in all of its ramifications. That will minimize infection contacts.

By proper organization of our staffs and facilities we can reduce the hazards of hemorrhage, and by consultation, the hazard of obstetric trauma and operative risk.

By education of the public and profession we can reduce the convulsive toxemias of pregnancy.

By staff conferences we can measure our organization and our results and effect changes to continue to make our hospitals worthy of the increasing confidence of our maternity patients.

2206 LOCUST STREET.

A List of 40 Skin Diseases

Which Secondary Syphilis May Resemble

Acne vulgaris, seborrheic dermatitis, pityriasis rosea, tinea versicolor, measles, scarlet fever, typhoid fever, toxic erythema, maculo-anesthetic leprosy, erythema multiforme, urticaria, leukoderma, chloasma, psoriasis, scabies, arsenical keratosis, varicella, dermatitis venentat, pyoderma, ecthyma, arsphenamine dermatitis, variola, pityriasis lichenoides chronica, lichen planus, papular tuberculides, nodular leprosy, eczema (palmar), lichen scrofulosorum, pityriasis rubra pilaris, keratosis pilaris, lichen spinulosis, dermatophytosis (ringworm), impetigo contagiosa, granuloma annulare, acne cacheticorum, acne scrofulosorum, acne necrotica, gumma, furunculosis, yaws.—Do a blood serologic test.

Modern serologic tests are 99.75 per cent specific, 95.00 per cent sensitive, in the diagnosis of untreated syphilis. Do more of them! Supplement No. 5 Venereal Disease Inf., U.S.P.H.S.

POLIOMYELITIS: SYMPTOMATOLOGY AND TREATMENT

PART II.

By FRANK E. STEVENSON, M.D., Cincinnati, Ohio

Cerebrospinal Fluid.—A spinal puncture should be performed in every child with an unexplained illness and with manifestations of meningeal irritation. The pressure of the fluid may be normal or moderately elevated in poliomyelitis; its appearance varies from clear to hazy or that of ground glass. The glucose and chloride contents of the spinal fluid are ordinarily within normal limits. The lymphocytes almost invariably predominate in the fluid. The total cell count is increased, usually ranging from 50 to 300 per cubic millimeter. Very rarely, high counts of 2,000 are reported. On the other hand, definite but unusual cases of poliomyelitis occur without any increase in cells of the spinal fluid. The cell count is usually highest late in the preparalytic stage or at the onset of paralysis. A decrease in cellular response then takes place with the count usually returning to normal between the second and third week of illness. The globulin content of the fluid, on the other hand, while either normal or slightly increased at the onset, gradually rises as the cell count drops. The presence of globulin in the spinal fluid offers confirmatory evidence of poliomyelitis when the patient is seen for the first time late in the paralytic stage. An increase in globulin content in the absence of cell changes is not pathognomonic of poliomyelitis since similar changes are found in generalized paralysis following diphtheria and in infectious polyneuronitis with facial diplegia.

The accompanying chart* represents the average determinations based upon studies made in a group of forty-two patients with poliomyelitis. The first determination was made at the time of hospitalization; the second, approximately fourteen days after the onset of the paralysis; and the third, on the twenty-first day.

TREATMENT.—(A). Prophylactic Treatment. —Isolation.—In the state of Ohio, all patients are isolated until recovery from the acute manifestations of the disease has occurred. In no case, however, is release from isolation permitted until three weeks have elapsed since the onset of the first symptoms. Since the virus is capable of surviving for a time outside the body, concurrent disinfection of nose, throat and bowel discharges and of contaminated articles, is required. For the same reason, terminal disinfection, consisting largely of cleansing of the sick room and premises, is also required at the end of the period of isolation.

*See Fig. V, page 793, July issue, The Journal.

Because of lack of space, bibliography is omitted, but will be published in author's reprints.

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Quarantine.—With the exception of the wage earner, all contacts residing in the home or place with the patient and who come into contact with the patient or his discharges, are quarantined. Under these conditions the period of quarantine continues throughout the period of isolation and for an additional interval of three weeks after terminal disinfection, and the release of the patient from isolation. The wage earner, however, is not quarantined if his work does not bring him into contact with children or with the food supply. Children under sixteen years of age living apart from the patient are quarantined for a period of twenty-one days from the last exposure.

IMMUNIZATION.—(1) Active Immunization. —As a rule, the virus of poliomyelitis invades the body without any preliminary warning of exposure to the disease. This fact, and the apparent lack of value of convalescent serum when it is administered after the onset of symptoms, make the use of a vaccine for the production of active and prolonged immunity highly desirable. Unfortunately, a safe and effective poliomyelitis virus vaccine for use in the production of active immunity against the disease is not available at the present time.

(2) **Passive Immunization.**—Pooled convalescent poliomyelitis serum and pooled adult serum are sometimes used for prophylactic purposes to produce rapid although temporary immunity to the disease. If available, the serum may be given to the contact, although relatively few persons exposed to poliomyelitis actually contract the disease in its clinical form. Again, serum is sometimes administered to those who may come into contact with the virus at some period during the epidemic. Under such conditions an attempt is made to maintain humoral immunity by making repeated injections of the serum at two or even three week intervals throughout the course of the epidemic. Because of the quantity of serum needed, this type of procedure cannot be readily carried out on an extensive scale unless a large,

well supervised serum center is established. While encouraging in the main, both clinical and experimental studies in regard to the prophylactic value of convalescent serum are somewhat conflicting. The exact part played by humoral immunity in the prevention of second attacks of poliomyelitis has been questioned. Some authors contend that resistance to second attacks of poliomyelitis is largely if not entirely due to local nervous tissue immunity and that the humoral immunity may be entirely coincidental. In any case, if convalescent serum is of no prophylactic value when administered in adequate dosage before the nervous system has been invaded, then nothing can be expected from its use in the therapeutic treatment of the disease. That which constitutes an adequate dose of serum for the human being is not known. Certainly 20 cc. of pooled convalescent serum, 40 cc. of pooled adult serum, and 80 cc. of whole adult blood must be considered of minimal and probably often of inadequate volume. Where whole blood is used, multiple intramuscular injections with blood obtained from two or more donors obviously is to be preferred. Always, the usual precautions must be taken to avoid the possible transmission of syphilis.

Nasal Spray.—On the assumption that the olfactory nerve constitutes the usual route of invasion, many experimental studies have been carried out in an attempt to make this pathway impassible to the virus. In the main, these investigations have consisted in the application of various types of chemical substances to the olfactory mucosa. Of this group, a solution of zinc sulphate has been found very effective in preventing experimental poliomyelitis following nasal instillation of the virus. As a result of these studies, a 0.5 per cent solution of sodium chloride containing 1 per cent zinc sulphate and 1 per cent pontocaine has been recommended for prophylactic use in the human being. The solution can only be applied by a physician familiar with the technique of the procedure.

Technique.—Spray method.—The solution must be applied to the olfactory mucosa. For this purpose an atomizer with a narrow, long metal tip is used. (DeVilbiss No. 156). Before beginning the treatment the nasal mucosa may first be shrunken with benzedrine inhalant or an aqueous solution of ephedrine. With the child in a sitting position, the attendant supports the head which is tilted backward about 45 degrees. A nasal speculum is introduced and the atomizer tip under direct vision is inserted along the septum until it has passed the middle turbinate. Care must be taken that it does not impinge upon the roof of the nose. One cubic centimeter of the solution is then sprayed over the area. The procedure is then repeated on the opposite side. It is suggested that the treatments be given on three consecutive days and every two weeks thereafter until the epidemic has subsided.

Postural Method.—Since the spray method is somewhat difficult to carry out in young and uncooperative children and is also not without danger, the postural method for introducing the spray has been suggested. The child is placed in the dorsal recumbent position with the head completely inverted well over the end of the table. When properly performed, the base line of the skull extending from the infra-orbital ridge to the external auditory meatus lies in a horizontal position. With the aid of a nasal speculum, a calibrated medicine dropper is inserted approximately 0.5 cm. into the naris, at the anterior angle of the nose. The solution, previously warmed to body temperature, is then slowly introduced. Shahinian et al.[4], consider 0.5 cc. of the zinc sulphate solution as the average dose for a child under 10 years of age, 0.4 cc. for those between 10 and 14 years, and 0.25 cc. for adults. The patient is kept in the inverted position for one minute after the last drop is introduced. The solution is then expelled through the anterior naris by instructing the patient to turn over into the prone position, lift the head and gently blow the nose.

Rather severe and unpleasant reactions often follow the use of the zinc sulphate solution. These may consist of severe pain and burning in the olfactory area of the nose, of severe headache and of nausea and vomiting. Older children and adults often complain of loss or impairment of the sense of smell and sometimes of taste. While recovery of olfactory function may return in one to two weeks, it sometimes does not occur before six months have passed. The return of the sense of smell is sometimes temporarily associated with an unpleasant distortion of both taste and smell for specific substances and odors. The loss in sense of smell, however, would seem to be our best criterion of protection.

The exact place of the zinc sulphate nasal solution in the prophylaxis of poliomyelitis cannot be determined until additional clinical studies have been made. Until the severe, unpleasant reactions which often follow the treatment have been eliminated, the general use of the solution on a widespread scale cannot be urged. Added to these reactions has come word from Toronto[5] of apparent clinical failure of the zinc sulphate solution to confirm the prophylactic results obtained from its use in experimental poliomyelitis. It cannot be stated whether the clinical results are due to ineffectiveness of the spray when applied to man, to an incorrect assumption that the olfactory nerve is the usual route of invasion of the virus, or to ineffectiveness of the treatment as outlined at the present time. It should be pointed out that in a group tested in the

Toronto study, only 25 per cent were found to have loss in sense of smell.

Crowds.—The transmission of poliomyelitis is thought to take place mainly through carriers who presumably are present in large numbers during an epidemic. As in most infectious diseases, the carrier probably is not merely a contaminated person but one with a low grade or subclinical form of infection. Theoretically, then, to avoid crowds is to reduce the number of potential contacts. While possibly resulting from the control of some unknown factor, the failure of the occurrence of poliomyelitis in strictly isolated child-caring institutions in epidemic areas suggests the prophylactic value of avoiding contact with potential carriers.

With the general public, measures to control the spread of the epidemic are often difficult to enforce and their results quite uncertain. Children transported from epidemic to non-epidemic areas may well be quarantined for three weeks before being permitted to come into contact with children and young adults. Conventions and gatherings which attract visitors to an infected area should be cancelled. Children from non-epidemic regions should not be permitted to enter camp or even to visit in sections where poliomyelitis is prevalent. Whether the avoidance of crowds in epidemic areas should be a voluntary procedure or an enforced public health edict cannot be answered, for no uniform regulation can be laid down. Whether or not schools, churches, theatres, and swimming pools are to be closed and public gatherings prevented or whether a compromise restriction applied only to children under sixteen years of age is to be enforced, must depend upon prevailing circumstances of the individual community. Enactments forbidding public gatherings often intensify the general atmosphere of apprehension although occasionally, such regulations create a feeling of relief because it is believed that something is being done to check the epidemic. In general, however, regulations of this type exert little or no influence upon the course of poliomyelitis epidemics.

Food.—During an epidemic of poliomyelitis, special attention should be given to the source and character of food stuffs, particularly those ingested in the raw state. Since in rare instances milk epidemics have been reported, a study should be made of the source of supply of milk and of milk products. Without alarming the public, an attempt should be made to determine whether any relationship exists between patients ill with the disease and a particular milk route or milk product. Pasteurization of all milk and milk products is indicated. In case of doubt, milk may be boiled and questionable products avoided. Raw fruits and vegetables should be carefully cleaned before eaten. Needless to state, children should be instructed to carefully wash the hands and face before eating. Hand shaking should be avoided at meal time.

Insects and pets.—Procedures are indicated for carefully protecting food against flies. Insects should be destroyed and additional measures taken to protect children from flies, mosquitoes and the like. Because of the somewhat remote danger of transmission of the disease by means of animals, handling of household pets is often warned against during the epidemic.

Illness.—Children should not be permitted to visit persons who are ill, regardless of whether the patient is a child or an adult. At the onset of an illness the nature of which is not definitely determined, it is advisable that the patient be isolated immediately from other members of the family.

(B). Therapeutic Treatment.—The treatment of poliomyelitis may be discussed according to the three phases of the disease: (1) the acute or tender stage; (2) the stage of convalescence; and (3) the stage of residual paralysis or reconstruction.

The Acute or Tender Stage.—The duration of the acute stage may range from one to six weeks. The treatment of this period of poliomyelitis is often divided into two parts: (A) treatment during the preparalytic stage and (B) treatment during the stage of paralysis. Since the general type of therapy does not differ appreciably in the two stages, they will be discussed together.

Rest.—The exact part that physical activity plays in the localization and the extent of the paralysis is largely conjectural. Is the frequency of leg involvement in the disease influenced in any way by the relatively great activity to which the lower extremity is subjected in children, even during the period of invasion? Now and then, clinical observations seem to suggest that physical activity during the preparalytic and early paralytic stage may modify the course of the disease. For example, there is the instance of the adult who developed paralysis with extensive involvement of the lower right extremity after driving a car for hours during the preparalytic stage, with the right foot constantly either on the accelerator or brake. Again, a young typist continued at work with symptoms of headache and stiffness of the neck, only to develop extensive paralysis of both upper extremities. The day following the participation in several sets of tennis, a patient of a colleague developed a fulminating, progressive form of poliomyelitis. Similar observations have been recorded in the literature. What part, if any, rest and fatigue play in determining whether the paralytic or non-paralytic form of the disease will occur is not known. Clinical impressions, moreover, are always dangerous and misleading because they are

so frequently based upon coincidence. On the basis of available evidence we are not even justified in assuming that fatigue or physical activity play even an important part in influencing the course and prognosis of poliomyelitis. On the other hand, the factors of rest and fatigue cannot be disregarded either in the prophylactic or therapeutic treatment of the disease.

Unless unavoidable, the patient should not be transported long distances during the tender stage to seek hospitalization and medical attention, but should be kept at absolute and complete bed rest. As far as possible, excitement and unpleasant disturbances are to be avoided. Nursing and medical attention should be carried out gently and quietly. Every effort should be made to discourage physical activity. The application of splints in the paralytic stage, in addition to preventing deformity, also brings about a stage of enforced rest on the part of the involved extremity.

Since restlessness is often merely a manifestation of discomfort, an earnest attempt should be made to provide for the comfort of the patient. Beds with sagging springs are either to be avoided or should be corrected by placing boards beneath the mattress in the long axis of the bed. The symptoms of meningitis are often exaggerated by the patient's posture in bed. In the presence of unexplained symptoms of discomfort, an attempt should be made to change or adjust the child's position. Sedatives, in addition to the use of physiotherapeutic measures discussed in the article on the orthopedic treatment of poliomyelitis, are often indicated in the symptomatic treatment of hyperesthesia, tenderness and pain. Relief from headache can often be obtained by the administration of acetyl-salicylic acid and by the local application of an ice cap or cold compresses to the head. If the headache becomes protracted, sedatives or a spinal puncture is often indicated.

Involvement of the respiratory mechanism in poliomyelitis usually results in apprehension and increased restlessness which in turn increases the oxygen requirements and the respiratory distress. The administration of oxygen and also of sedatives in minimal and increasing doses may afford some relief. As a general rule, the use of morphine should be avoided in the presence of respiratory embarrassment.

Gastro-enteric System.—The diet in poliomyelitis, in general, does not differ from that in any acute infectious disease. An adequate intake of fluids should be maintained throughout the course of the illness. A liquid diet is usually indicated during the early stage. Solid foods are added as soon as improvement is noted in the child's appetite and in his ability to ingest solid foods. Constipation is of frequent occurrence in poliomyelitis and should be combated by mild laxatives throughout the illness. Paralysis of the pharynx gives rise to the most difficult feeding problem.

Patients with pharyngeal paralysis are in constant danger of contracting pneumonia or atelectasis from the aspiration of pharyngeal or salivary secretion, ingested food or vomitus which has accumulated in the pharynx. In order to decrease the danger of aspiration pneumonia, the foot of the bed should be elevated and the patient placed on his side or abdomen in order that materials in the pharynx may drain forward into the mouth. Nursing attention must be immediately available at all times. An electric or water pump suction outfit or aspirator is often needed. In the absence of such equipment, a catheter attached to a large syringe, or a sponge on a sponge stick may be used. Now and then, a tracheotomy is performed in order to decrease the danger of complications from aspiration. Even in the presence of a tracheotomy, close nursing supervision, postural drainage and aspiration must be continued. In the presence of pharyngeal paralysis, gavage feeding may be attempted. If vomiting is a troublesome complication, a tube may be passed through the nose and left in place; smaller quantities of fluids may then be given at more frequent intervals. If feeding by gavage proves to be unsatisfactory or dangerous, methods for the parenteral introduction of fluids may be substituted or they may be used to supplement the gavage feedings. Blood transfusions may be given from time to time; with the development of a high red cell count, human serum may be substituted for whole blood.

Respiratory System.—Three main types of respiratory embarrassment or difficulty are recognized in poliomyelitis, namely: (1) that due to paralysis of the intercostal muscles or the diaphragm, or both; (2) that due to paralysis of the pharyngeal muscles; (3) that due to paralysis of the respiratory center. In addition, various combinations of these three forms may also occur in the same patient.

Patients with respiratory involvement are particularly susceptible to pneumonia. No one with a respiratory infection should be permitted to come into contact with patients of this type. Gowns and masks should be worn at all times by those in attendance; the hands should be thoroughly washed before rendering nursing or medical care. The treatment of patients with pharyngeal paralysis has been discussed in connection with the gastro-enteric tract. The use of atropine to decrease the faucial and oral secretions should either be avoided or undertaken with considerable caution, since its administration increases the tenacious character of the secretions and adds to the difficulty of their removal. Efforts directed toward the treatment of paralysis of the respiratory center are usually of little avail. A mixture

of 95 per cent oxygen and 5 per cent carbon dioxide may be used to stimulate the center and relieve cyanosis. The use of the mechanical respirator in the treatment of respiratory difficulty due to pharyngeal paralysis or to paralysis of the respiratory center is generally considered not only to be of no value but it is even said to be contra-indicated. Under such conditions, aspiration pneumonia is prone to occur. The most favorable results obtained with the respirator have been observed among those patients with paralysis of the intercostal muscles and of the diaphragm.

If a respirator is not available to the community and cannot be obtained, the private physician or the local health commissioner, at the onset of an epidemic, should learn where the nearest respirators available in an emergency are located. Patients placed in the respirator must remain under constant nursing observation. The rate of the machine should correspond to the respiratory rate of the patient. The negative pressure requirement for the adult is usually 15 cm. of water; that for the child ranges from 10 to 15 cm.

If patients with pharyngeal paralysis or those with paralysis of the respiratory center are to be placed in a respirator with the hope of providing relief or because an associated paralysis of the respiratory muscles is present, every effort should be made to prevent the occurrence of an aspiration pneumonia. The patient may be placed upon the abdomen, and, if possible, the head should be lowered. Frequent removal of secretions from the throat by aspiration is usually indicated.

In spite of the fact that many patients die of complications either before or during convalescence and that only a few survive as a result of the use of the respirator, the survival of these few and the relief afforded those who have an obviously fatal outlook, justify the existence of the respirator.

Urinary System.—Retention of urine, while not a common complication, occurs with such frequency in the early stage of poliomyelitis that it must always be kept in mind. In the home as in the hospital, a record should be kept of the time of urination and of the quantity of urine voided. The nurse or mother should be instructed to palpate the abdomen at regular intervals for evidence of bladder distention. In the presence of retention of urine, catheterization is often necessary. After a few days the patient usually recovers from the complication and is again able to void voluntarily or involuntarily.

Nervous System.—The Spinal Puncture.—The greatest value of the spinal puncture lies in the aid to diagnosis provided by examination of the cerebrospinal fluid. The withdrawal of cerebrospinal fluid in the presence of severe headache and an increase in intracranial pressure is of symptomatic and therapeutic value. Now and then, the lumbar puncture is performed for the intrathecal introduction of convalescent serum. Spinal puncture is also performed in forced spinal drainage.

Continuous or forced spinal drainage.—Retan and Kubie[7] have recommended the use of continuous spinal fluid drainage in the treatment of poliomyelitis. The treatment is carried out with the patient on a Bradford frame and a spinal puncture needle and stylet retained in place in the lumbar region. A hypotonic sodium chloride solution is then introduced slowly by intravenous drip over a period of hours. More recently a series of treatments alternating with periods of rest have been recommended. While the value of the procedure has not as yet been definitely determined, the authors contend that inflammatory products are removed from the depths of the nervous system and immune substances are transmitted more readily from the blood to the nerve cells.

Dehydration.—Dehydrating agents are sometimes used in the treatment of poliomyelitis for the purpose of reducing the oedema of the brain and cord. For this purpose a hypertonic solution of glucose or sucrose (25 to 50 per cent) is given slowly by intravenous injection. The quantity of the hypertonic solution injected depends largely upon the size of the patient. The patient is carefully watched during the treatment. If the use of a large quantity of the solution is anticipated, blood pressure determinations should be made throughout the period of injection and the treatment stopped if a significant drop in reading occurs. The clinical results obtained with this form of therapy are seldom impressive but are worthy of trial in the bulbar and cerebral type of poliomyelitis.

Serum Therapy.—Using the streptococcus, which he considers the specific cause of poliomyelitis, as an antigen, Rosenow has prepared an immune horse serum for use in the treatment of the disease. Similarly, experimental poliomyelitis antivirus serums have been prepared. In the main, the source of serum used in the treatment of the disease has been the human being. Both convalescent poliomyelitis serum and adult serum are used. Adult serum is obtained from persons who apparently have not had poliomyelitis. The use of this serum is based upon the observation that the blood serum of the great majority of adults contains immune substance for the virus.

Route of Injection.—In view of the rapidity with which the virus inflicts its damage upon the nerve cells, it seems obvious that if serum is to be used it should be introduced directly into the blood stream. Since pooled serum may represent all four blood types, some danger of reaction is associated with its administration by this route.

Apparently any tendency toward a reaction is usually prevented by diluting the serum with one or more volumes of physiologic salt solution, or 5 per cent glucose solution in physiologic saline; a minimal dose of adrenalin may be added to the solution. The diluted serum is then introduced very slowly into the blood stream, preferably by the intravenous drip. Sometimes, aspirin is given to combat any febrile reaction which may occur. In the absence of serum, whole blood may be given either intramuscularly or intravenously by transfusion. Now and then the intrathecal use of the serum is recommended, either alone or in combination with the intravenous or the intramuscular injection. The volume of the serum introduced intraspinally should be somewhat smaller than the quantity of cerebrospinal fluid removed.

The intrathecal introduction of serum is usually not recommended. Not only is the volume of serum introduced quite small but it is thought that the immune substance cannot reach the site of the infection when introduced by this route. Furthermore, the intrathecal introduction of a serum is generally considered to be contraindicated in the bulbar form of poliomyelitis because of the danger of increasing the oedema of the involved areas. There is some evidence, too, that monkeys with experimental poliomyelitis respond less favorably when the serum is administered by the combined intrathecal-intravenous route than when it is introduced by intramuscular injection alone.[5]

Dosage.—The knowledge that the donor has recently recovered from poliomyelitis reveals very little in regard to the potency of the serum. In fact, it has been shown that recovery may occur without the development of humoral antibodies. In the absence of practical methods for standardization of convalescent and adult serum, it is desirable that an effort be made to obtain a serum which is uniform in potency. This is usually accomplished by combining or pooling the serum from a number of donors. With the use of whole blood somewhat similar results may be obtained by means of a series of small blood transfusions. Unless clinical improvement quickly takes place at least three small transfusions from a similar number of donors may be given within thirty-six hours. In order to decrease the chance of reaction, the patient's blood should be rematched before each subsequent transfusion.

The volume of serum or blood injected depends largely upon the source of the material. Although it has been demonstrated that a uniform pooled adult serum may possess an immune titer equal to or even greater than that of a pooled convalescent serum, as a rule the potency of any adult serum is considered to be half that of the convalescent form. The size of the blood transfusion or of the intramuscular injection of whole blood, whether obtained from a convalescent patient or from an adult, should be approximately twice that of the respective serums, since approximately one-half of the blood volume consists of cells.

The dose of convalescent serum used is largely empirical, ranging in volume from ten to several hundred cubic centimeters. If it requires from 60 to 300 cc. or more of meningococcus antitoxin to bring about recovery from meningitis when introduced intravenously, what must be the dose of the relatively much less potent convalescent poliomyelitis serum in the treatment of a disease whose infecting agent lies at a much more inaccessible site? If human serum is to be used in the treatment of poliomyelitis, large doses seem to be indicated. The volume of serum to be injected should be estimated in the same manner as the physician determines the quantity of a small or moderate sized blood transfusion. The injection of serum may then be repeated as indicated within twelve to twenty-four hours. Because of the tendency toward hemorrhages into the nervous tissues, care should be taken not to overload the circulatory system, particularly in the presence of hypertension.

Value of serum therapy.—The medical profession has become imbued with the idea that if convalescent or pooled adult serum can be given before the onset of paralysis, definite beneficial results may be expected. It is often stated that the early administration of serum may either prevent paralysis or reduce the degree or extent of any paralytic involvement which may occur. Then, too, it is stated that if paralysis should occur the recovery is much more likely to be complete than in those patients to whom serum was not given. At the present time these statements are being seriously questioned. It is questioned whether serum can be of any value after the nerve cells have been invaded by the virus. Lack of uniformity of dose and lack of carefully controlled studies have obscured the value of human serum in the treatment of poliomyelitis. At the present time there is no conclusive proof that convalescent or pooled serum is of any definite value in the treatment of the disease. On the other hand, it has also been pointed out that there is no absolute proof that the serum is of no value. A similar statement, too, can be made in regard to the use of Rosenow's serum. Under the circumstances, convalescent and adult serum, if used, should be administered in large doses, although little or no beneficial effects may follow the injection. To refrain from the use of convalescent serum in the treatment of the disease cannot be considered as neglect.

The treatment of poliomyelitis during the convalescent stage and the stage of residual paralysis is largely orthopedic.

PRODUCTION OF COLLATERAL CIRCULATION AND RELIEF OF VASOSPASM IN PERIPHERAL VASCULAR DISEASE

By LAWRENCE N. ATLAS, M.D., Cleveland, Ohio

THE production of collateral circulation or the relief of vasospasm do not constitute the entire field of therapeusis in peripheral arterial disease. The care of the feet, the relief of pain, and the treatment of ulceration, infection, and gangrene present special prophylactic, medical, and surgical problems. However, the successful treatment of the organically occlusive forms of peripheral arterial disease (thrombo-angiitis obliterans, arteriosclerosis, embolism, etc.) depends primarily on our ability to augment blood flow through the extremities by therapeutically stimulating the growth of collateral arteries, while the elimination of spasm must be the primary objective in treating the vasospastic diseases.

Because general interest in this field received its initial impetus through the introduction of the suction-pressure type of apparatus, the idea that the treatment of peripheral vascular disease is empirically mechanical has unfortunately taken root. What we wish to do in this communication is to present the various anatomical and physiological principles upon which our therapeutic endeavors are based together with the practical application of these principles.

There are differences of opinion as to why collateral channels develop when circulation in the main arterial trunks is obstructed. Some hold that the rise in pressure behind an obstruction distends the vessel and its proximal branches. However, according to Sir Thomas Lewis[1], two observations made from the experiment of ligating a main arterial trunk contradict the validity of this thesis:

1. If an artery is ligated, that portion of the artery which lies between the ligature and the first proximal outgoing branch constricts, atrophies, and ultimately becomes obliterated instead of dilating.
2. Only branches carrying blood to the ischemic area dilate; branches lying nearer to the ligature remain undilated if they run to tissue the blood supply of which is undisturbed.

It is the opinion of Sir Thomas Lewis[1] that when an artery becomes acutely obstructed two processes take place. First, there is a physiologically increased flow through anastomotic channels, which is brought about by chemical changes in the tissues of the ischemic region, consisting of an accumulation of vasodilating metabolites which produce a marked dilatation of the arteriolar capillary bed. The affected region thus becomes one of lowered resistance to blood flow, with consequent increased flow through open collaterals feeding that region. The second phase is one of growth. The anastomotic channels hypertrophy in response to the increased flow of blood through them. An artery through which blood flow is increased grows in width and length and becomes tortuous. When the arterial obstruction is gradually progressive, these two processes, the one of physiologically increased flow and the other of hypertrophy, merge.

Since the increased flow through anastomotic channels is the basis for the establishment of a permanent collateral circulation, anastomotic arteries must be present to begin with, and these vessels must not be so diseased that they are incapable of hypertrophy. So far as the availability of collateral channels is concerned, there is a veritable network of them in the human extremities. Their ability to hypertrophy in response to increased flow through them is another matter. In acute arterial embolism, where the limb does not have to be sacrificed because of gangrene, the chances of forming an effective collateral circulation are excellent since the anastomotic arteries are ordinarily not diseased. Since thrombo-angiitis obliterans is a patchy inflammatory involvement and since the disease usually attacks younger individuals, the possibility of producing collateral circulation in the extremities is, in this instance, likewise excellent. McKittrick and Root claim that diabetics suffering from peripheral arteriosclerosis may exhibit an unexpectedly effective collateral circulation.

I doubt if further growth of collateral arteries can ever be therapeutically stimulated in the advanced stages of Buerger's disease and diabetic sclerosis, and in the senile type of arteriosclerosis. The most we can hope for here is the canalization of occluded vessels, and the inhibition of occlusion of patent vessels by increasing the rate of flow through them.

Besides lowering the peripheral resistance,

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An abbreviation of a paper read before the Staff of Cleveland City Hospital, February 22, 1938.

there are theoretically three other ways of increasing blood flow through an extremity:

1. The cardiac output could be increased.
2. The blood volume could be increased.
3. The blood viscosity could be decreased.

Increasing the cardiac output is impractical.

It was with the idea of increasing blood volume and lowering blood viscosity that Koga in 1913 began to use intravenous injections of Ringer's solution in cases of Buerger's disease. This form of therapy became successively developed through the efforts of several men until in 1926 Silbert suggested the use of hypertonic saline. That intravenous hypertonic saline, given in amounts of 50 to 250 c.c. in 3 to 5 per cent concentration depending on the disease and age of patient, exerts a beneficial action in occlusive arterial disease has been well established. Oscillometric tracings taken by Samuels before and after intravenous injection of 250 c.c. of 5 per cent saline showed an immediate increase in peripheral pulse amplitude which persisted for several hours. However, since after the intravenous injection of a large quantity of saline the volume of circulating fluid is brought back to normal in thirty minutes or less, it is doubtful whether the observations made by Samuels can be entirely explained on the basis of increased blood volume or decreased viscosity.

At the present time, we must depend entirely upon methods which decrease peripheral resistance in order to increase blood flow through an extremity.

Since it would be impossible to discuss in detail all the available methods of relieving vasospasm or of producing a dilatation of the arteriolar capillary bed in an extremity, we will confine ourselves to a discussion of those most commonly used.

PROPHYLACTIC MEASURES

Patients are cautioned to avoid:

(a) Exposure to cold.
(b) Use of tobacco.
(c) Emotional upsets.

All of these prophylactic measures are of great importance as the disregard of any of them can produce local vasoconstriction, or initiate or aggravate existing spasm.

BED REST

This is still one of the most important single means of treating occlusive arterial disease. With the extremity at complete horizontal rest, not only are the metabolic demands of the tissues at a minimum but there also occurs a decrease in vasoconstrictor tone. The exceptions to this are those cases of thrombo-angiitis obliterans where a marked spastic factor exists, and cases of acute arterial embolism and thrombosis which are in the initial stage of reflex spasm. However, since the whole point in treating peripheral vascular disease is to get patients ambulatory and to keep them that way, bed rest is usually reserved for complications which threaten the integrity of the limb.

VASODILATING DRUGS

Theobromine and various forms of nitrites produce a peripheral vasodilatation. They are prescribed in the dosages ordinarily used. Alcohol is also of benefit in this regard. It is prescribed in small quantities: ½ oz. two or three times daily in the form of brandy. Papaverine is of particular value in releasing the spasm resulting from sudden arterial occlusion. It is given intramuscularly ¼ to ½ grain every four to six hours.

Acetylcholine is believed to be the chemical mediator of parasympathetic impulses. The product supplied commercially for therapeutic use is acetyl beta methyl choline chloride and is called "mecholyl". Mecholyl is an active vasodilator, but its action is of short duration when given orally or hypodermically. However, when administered by iontophoresis, a dilatation of the subpapillary arteriolar bed is induced which may persist for 12 to 24 hours. Reinforced asbestos paper soaked with a 1:500 solution of the drug is applied to the part being treated, and 40 milliamperes of current from the positive pole of a galvanic generator are passed through the paper for 20 minutes.

Occasionally symptoms of generalized parasympathetic stimulation occur. They are abolished with a hypodermic of atropine. Mecholyl iontophoresis is of particular value in Buerger's disease and Raynaud's disease, both before and after sympathectomy, for the treatment of ulceration and gangrene. I have also found it useful for treating and preventing "trophic" lesions following peripheral nerve injuries. It has long been a matter for query and speculation as to why trophic lesions should develop in the area innervated by a peripheral nerve that has been sectioned. Perhaps the answer to this problem can be found in the work of Freeman, Smithwick, and White, who, in 1934, published the results of their research on adrenalin sensitization. They found that if postganglionic vasoconstrictor fibres are destroyed, the arterioles innervated by these fibres become extraordinarily sensitive to minute amounts of circulating adrenalin. This sensitization begins one to two weeks after the postganglionic neurones have been destroyed. The arterioles thus affected become markedly and persistently contracted, and the tissues which they nourish atrophy. It has been shown that the postganglionic vasoconstrictor fibres innervating the blood vessels in the extremities are carried within the peripheral nerve trunks and their branches. Consequently, section of a peripheral nerve will destroy these sympathetic neurones with their resultant de-

generation, and the arterioles in the region innervated by that somatic nerve will become sensitized in the manner just described. For this reason, after section and suture of a peripheral nerve, everything possible should be done to counteract the effects of such sensitization. The patient should keep the denervated part warm at all times, he should avoid emotionally upsetting situations, and he should receive mecholyl iontophoresis treatments to the denervated part until regeneration has taken place.

LOCAL HEAT AND FEVER THERAPY

Hot baths, hot soaks, and baking by means of radiant heat are some of the oldest forms of therapy in peripheral arterial disease. There is an optimum temperature for external applications of heat at which maximal vasodilatation is produced and beyond which an increase in tissue metabolism occurs with increased oxygen requirement. This temperature is around 94 degrees F. All baths and soaks are ordered at this temperature. Unless the cradles available for baking are thermostatically controlled, it is safer to use them unlighted. In this case, the cradle should be covered with several layers of blankets and the extremities wrapped in lamb's wool in order to conserve body heat.

Diathermy, properly used, has a place in the treatment of peripheral arterial disease.

Intravenous typhoid finds its chief use in Buerger's disease. Fifteen million organisms given intravenously are the initial dose. It is repeated two or three times a week, the dose being increased each time sufficiently to give a febrile reaction.

MECHANICAL METHODS AND EXERCISES

The introduction of the suction-pressure machine by Herrmann and Reid and by Landis and Gibbon focussed the attention of the profession on the subject of peripheral vascular disease. The inventors of the suction-pressure machine felt that it acted by mechanically stretching and sucking blood into the minute vessels.

However, de Takats[2] feels that the machine accomplishes its therapeutic effects chiefly by producing a venous congestion. During the suction phase, the tightening of the cuff of the boot about the thigh obstructs venous return, the minute vessels become filled with stagnant blood, and anoxia of the tissues occurs (indicated by reduced oxygen saturation of venous blood) with increased concentration of vasodilating metabolites. The congested zone becomes one of lowered resistance to blood flow and a reactive hyperemia occurs. The excess of metabolites is removed when the cuff of the boot is released during the pressure stage.

Working on the theory that the suction-pressure machine acts in the manner described, Collens and Wilensky substituted for the boot a pneumatic cuff about the thigh, and devised a machine to alternately inflate and deflate the cuff at adjustable pressures and time ratios. The advantages of this machine are that it can be used for long periods at a time, there are few contraindications to its use, and it does not traumatize tissues, the blood supply of which is impaired. The machine is particularly efficacious in healing ulceration, in relieving the pain incident to gangrene, and in ameliorating the symptoms of intermittent claudication.

de Takats[2] has modified the Collens-Wilensky method by having his patients use an ordinary blood pressure cuff which they operate manually at prescribed pressures and time ratios. This is excellent for home use in ambulatory patients.

In uncomplicated cases the inflation pressure used is diastolic pressure and is applied for two minutes. The pressure is released for four minutes. The release period is made purposely longer to allow for a complete paying off of the oxygen debt before the next cycle is begun. In the presence of local mortality, such as ulceration, infection, or gangrene, the inflation pressure is arbitrarily set at 20 to 40 m.m. Hg.—one minute on and two off. Treatment is given in 1 to 24 hour periods, depending on the condition.

The type of exercises introduced by Buerger are no doubt familiar to you. It is possible that they also act by producing a venous congestion.

The Sanders' bed is an oscillating bed which performs the Buerger exercises for the patient without the exertion of muscular effort. He merely lies in the bed which slowly and constantly shifts between a position where the head is higher than the feet and vice versa.

SURGICAL PROCEDURES ON SYMPATHETIC NERVOUS SYSTEM TO ELIMINATE VASOCONSTRICTOR TONE

The operation of periarterial sympathectomy, devised by Jaboulay and modified by Leriche, represented the first serious attempt on the part of surgeons to attack the problems of peripheral vascular disease through the medium of surgical procedures on the sympathetic nervous system. The operation, unfortunately, had a false anatomical basis, and so it never achieved the results expected of it. It was assumed that vasoconstrictor fibres to the extremities were given off directly from the paravertebral sympathetic ganglia to contiguous arterial trunks and were distributed to the minute peripheral vessels within the adventitia of these trunks and their branches. However, in 1914, Kramer and Todd[4] published their observations which showed that in the upper extremities, the sympathetic fibres to the blood vessels were carried in the branches of the brachial plexus. This research initiated the various investigations which have resulted in

our present conception[5] of the anatomy of the autonomic innervation of the peripheral blood vessels. These anatomical facts have found their practical expression in surgical procedures designed to interrupt the flow of vasoconstrictor impulses to the extremities.

Sympathectomy is the method of choice for treating Raynaud's disease. Properly performed it is followed by excellent results. The operation is also efficacious in relieving reflex spasm resulting from chronic irritative or inflammatory lesions involving blood vessels, nerves, synovial membrane, periosteum, etc. These constitute a variety of syndromes known as reflex vasomotor dystrophies. The vasospasm associated with the chronic "blue leg" of infantile paralysis is relieved by sympathectomy.

Although vasospasm does not ordinarily exist in diabetic and senile arteriosclerosis, the presence of the ordinary amount of vasoconstrictor tone tends to decrease the effectiveness of attempts to produce a peripheral dilatation by the methods outlined above for the reason that vasoconstrictor tone in the inferior extremities, is very difficult to release by medical or physiotherapeutic measures. This vasoconstrictor tone can be completely and permanently abolished in properly selected cases by means of a lumbar sympathectomy.

Unlike arteriosclerotic disease, thrombo-angiitis obliterans is often complicated by a definite vasospastic factor. The exact source of this angiospasm is not known, although it probably has its origin in a vasoconstrictor reflex which could result from such an inflammatory involvement of the contents of neuro-vascular bundles as exists in Buerger's disease. Sympathectomy in these cases is attended by very good results.

In cases where sympathectomy is not warranted, the less satisfactory method of temporarily blocking the sympathetic trunks with alcohol may be tried. Alcohol block is ideal in cases of acute arterial embolism, for not only will it release the reflex spasm present in these cases, but it will also facilitate the growth of collateral arteries by producing a peripheral vasodilatation.

The technique used to block the sympathetic trunks with alcohol is that described by White.[5] To accomplish permanent denervation of the lower extremity by means of a sympathectomy we use either the transperitoneal approach of Adson[5] or the retroperitoneal approved of Pearl[6]. For the upper extremity we used the technique recently advocated by Smithwick.[7]

10515 CARNEGIE AVENUE.

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Diagnostic Maxims in Secondary Syphilis

1. Do blood serologic follow up—3 months—on any lesion which was possibly primary syphilis.

2. For any generalized skin eruption—do a serologic test.

3. For any sore mouth or throat which does not heal in 10 days—do a serologic test.

4. For any unexplained patchy loss of hair—do a serologic test.

5. For any iritis or neuroretinitis—do a serologic test.

6. For any vague bone pains or polyarticular arthralgia—"acute, subacute, or chronic infectious arthritis"—do a serologic test.

SECONDARY SYPHILIS

The only visible lesions of secondary syphilis may appear on the mucous membranes, the skin being entirely spared.

LATENT SYPHILIS

1. All syphilis infections are latent—

a. At some time. b. Most of the time until ultimate break-down.

2. Latent syphilis is not recognizable clinically.

3. The diagnosis can only be made by serologic tests.

Do routine blood serologic tests.

A LIST OF 20 DISEASES

Which Hepatic Syphilis May Resemble.

Laënnec's cirrhosis, carcinoma of liver (primary or secondary), tuberculous peritonitis, myocardial failure with hepatomegaly and ascites, cholecystitis, cholelithiasis, echinococcus cyst, amyloid disease, cyst of kidney, Hodgkin's disease, hepatic abscess, chronic splenic anemia (Banti's syndrome), retroperitoneal tumor, pancreatic cyst, "catarrhal jaundice," gastric or duodenal ulcer, malaria, leukemia, disseminated carcinoma of the peritoneum.

Do a blood serologic test.

A LIST OF 7 DISEASES

Which Cardiovascular Syphilis May Resemble.

Rheumatic heart disease, arteriosclerosis, essential hypertension, angina pectoris, lymphosarcoma, Hodgkin's disease, dissecting aneurysm.

Do a blood serologic test.—Supplement No. 5. Venereal Disease Inf., U.S.P.H.S.

A CLASSIFICATION OF TUMORS

Compiled by LAWRENCE A. POMEROY, M.D.
Director of the Tumor Clinic, City Hospital, CLEVELAND

With the assistance of the members of the staff of the Tumor Clinic

PART IV

2. TUMORS OF BLADDER

X. **Secondary Tumor**

Direct invasion of the bladder by carcinoma of the cervix is common. True metastatic tumors are rare, melanoma and breast carcinoma being the most common primary tumors (Willis)[58].

3. TUMORS OF PROSTATE

I. **Adenoma**

II. **Leiomyoma**

III. **Enlarged Prostate** (this term is preferred to "hypertrophy", which should imply increased function)

IV. **Carcinoma**

- A. Adenocarcinoma (common)
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated (carcinoma simplex)
- B. Squamous Cell Carcinoma (rare)
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- C. Scirrhous Carcinoma (rare)

V. **Sarcoma** (rare) (see Section U).

VI. **Secondary Tumor** (rare, but melanoma, lung carcinoma and bone sarcoma have been reported as primary sites) (Willis)[58].

TUMORS OF SEMINAL VESICLES (very rare)

Carcinoma and sarcoma are so rare as to be curiosities (Stout)[51].

Melanoblastoma with metastasis to the seminal vesicles has been reported (Willis)[58].

4. TUMORS OF SPERMATIC CORD, EPIDIDYMIS AND TESTICULAR TUNICS

SPERMATIC CORD

I. **Fibroma**

II. **Lipoma** (most common tumor of spermatic cord)

III. **Myxoma** (and myxofibroma, myxolipoma)

IV. **Leiomyoma**

V. **Lymphangioma**

VI. **Dermoid Cyst**

VII. **Carcinoma** (rare)
This probably originates from cell rests of the wolffian body. No cases have been reported of neoplastic proliferation of the epithelium of the ductus deferens (Thompson)[53].

VIII. **Sarcoma** (see Section U).

EPIDIDYMIS

I. **Lipoma**

II. **Leiomyoma**

III. **Lymphangioma**

IV. **Dermoid Cyst**

V. **Carcinoma**

- A. Squamous Cell Carcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated
- B. Adenocarcinoma
  1. Well differentiated
  2. Partially differentiated
  3. Undifferentiated

VI. **Sarcoma** (see Section U).

TESTICULAR TUNICS
TUNICA VACINALIS

I. **Fibroma**

II. **Lipoma**

III. **Leiomyoma**

IV. **Lymphangioma**

V. **Adenoma**

VI. **Sarcoma** (see Section U).

TUNICA ALBUGINEA

I. **Fibroma**

5. TUMORS OF URETHRA (rare)

I. **Papilloma**

II. **Adenoma**

III. **Fibroma**

IV. **Caruncle in Female** (this is not a true tumor, structure may be vascular connective tissue or telangiectases covered by urethral epithelium)

V. **Carcinoma**

A. Squamous Cell
1. Well differentiated
2. Partially differentiated
3. Undifferentiated

B. Adenocarcinoma (in the male probably from glands of Cowper)
1. Well differentiated
2. Partially differentiated
3. Undifferentiated

VI. **Sarcoma** (see Section U).

VII. **Secondary Tumor**
In the female a primary kidney tumor may give rise to secondary tumors near the external meatus probably by retrograde venous embolism (Willis)[58].

6. TUMORS OF PENIS

I. **Lipoma**

II. **Adenoma**

III. **Hemangioma**

IV. **Papilloma**

A. Common Wart

B. Condyloma Acuminatum (probably inflammatory)

V. **Carcinoma** (all squamous cell)
A. Well differentiated (usually papillary)
B. Partially differentiated } Rare
C. Undifferentiated }

VI. **Sarcoma** (rare) (see Section U).
Kaposi's Sarcoma (possibly not a true tumor)

VII. **Secondary Tumor** (prostate is most common source) (Willis)[58].

7. TUMORS OF TESTIS

I. **Lipoma**
II. **Fibroma**
III. **Myxoma**
IV. **Leiomyoma**
V. **Chondroma**
} Rare

VI. **Adenoma**
Most of the seemingly pure benign neoplasms composed of a single tissue are in reality forms of teratomata (Stout)[5].

VII. **Interstitial Cell Tumor** (Ewing)[10].

VIII. **Teratoma**

A. Benign

B. Malignant
1. Adult Teratoma
2. Seminoma (embryonal carcinoma)
3. Embryonal carcinoma with lymphoid stroma
4. Embryonal adenocarcinoma
5. Chorionepithelioma

As arranged above by Ferguson[12], these tumors run from a low to high urinary content of prolan-like substance as shown by quantitative Aschheim-Zondek tests.
Adult adenocarcinoma occurs but its exact classification according to prolan in the urine is unsettled (Ferguson) (personal communication)[13].

IX. **Sarcoma** (rare) (see Section U).

Lymphosarcoma

There is no doubt that tumors composed chiefly of spindle cells occur in the testis, but their true nature and the possible relation to myoma and teratoma remain uncertain (Ewing)[10].

X. **Secondary Tumor**

Melanoma is the most frequent source of testicular metastases (Willis)[58].

TUMORS OF NERVOUS SYSTEM

SECTION R

I. **Brain and Spinal Cord**

A. Benign Tumor
1. Hemangioma
2. Lipoma
3. Fibroma
4. Chondroma
5. Chordoma

B. Glioma (compose about half of brain tumors)

1. Astrocytoma (about half of gliomas) (relatively benign)

2. Glioblastoma multiforme (formerly called spongioblastoma multiforme) (very malignant)

3. Medulloblastoma (usually found in posterior fossa in children)

4. Astroblastoma
5. Ependymoma
6. Spongioblastoma (polare)
7. Oligodendroglioma
8. Pinealoma
} Rare

The term neuroblastoma is now restricted to those rare tumors made up of neuroblasts. With the newer staining methods, most of the tumors formerly called neuroblastoma and neurocytoma are found to be medulloblastomas. (Karsner)[25].

II. **Pituitary**

A. Chromophile adenoma
1. Acidophile cell adenoma (acromegaly)
2. Basophile cell adenoma (Cushing syndrome)

B. Chromophobe adenoma (glandular deficiency syndrome)

C. Cyst (squamous or cylindrical cell)

D. Adamantinoma

E. Glioma

III. **Meninges**

A. Meningioma
Tumors of the cerebellopontine angle are usually either meningiomas or neurofibromas of the acoustic nerve.

B. Fibrosarcoma

C. Cholesteatoma

D. Melanoma

IV. Nerves

A. Neurofibroma
Tumors of the cerebellopontine angle are usually either meningiomas or neurofibromas of the acoustic nerve.

B. Neurogenic sarcoma

V. **Sympathetic Nervous System**—rare—(most common in adrenals)

A. Sympathigonioma

B. Sympathicoblastoma—cytoma

C. Pheochromoblastoma—cytoma

VI. **Secondary Tumor of Nervous System**

(especially from lung, breast, and kidney) (Willis)[58].

TUMORS OF BONE

SECTION S

This is practically the original classification of the Registry of Bone Sarcoma of the American College of Surgeons and the order used in that classification is preserved.

I. **Metastatic tumor** primary in tissues other than bone (especially from breast, prostate, thyroid and kidney).

II. **Periosteal fibrosarcoma** (parosteal, extraperiosteal).

III. **Osteogenic tumor**

A. Benign
1. Osteoma
2. Chondroma or osteochondroma

B. Malignant (sarcoma)
1. Periosteal
2. Medullary and subperiosteal
3. Sclerosing
4. Telangiectatic (bone aneurysm)

IV. **Inflammatory condition**

V. **Benign giant cell tumor**

VI. **Angioma**
A. Benign
B. Malignant

VII. **Ewing's tumor** (endothelial myeloma) (Ewing himself prefers angio endothelioma) (personal communication)[11].

VIII. **Myeloma**

The periosteal fibrosarcoma (probably of extra-periosteal origin and not a true bone tumor) should be clearly distinguished from the periosteal sarcoma. The former is relatively benign, the latter very malignant. However, some tumors arising outside of bone and supposed to be fibrosarcomas have, on more critical examination, proved to be neurogenic sarcomas, extremely malignant tumors.

The term "osteogenic" as applied to malignant tumors of bone does not necessarily mean "bone forming" as in some of these tumors there is practically nothing but bone destruction. Kolodny[26] defines "osteogenic" as meaning derived from embryonal forms of cells which if they matured normally would produce bone. He considers an osteogenic sarcoma to be an osteoblastoma.

The benign giant cell tumor is properly so called. It is usually not a sarcoma, however all grades of intermediate type exist. In this connection it should be remembered that some of the most malignant of the osteogenic sarcomas may contain giant cells somewhat similar to those of the benign giant cell tumor.

Chondrosarcoma should be classed as a distinct tumor of bone. The X-ray picture may be characteristic, it may invade the regional veins and the prognosis is somewhat better than in osteogenic sarcoma (Phemister)[39].

In addition to the tumors enumerated above adamanitinoma, choroma and liposarcoma apparently primary in bone have been described.

(Concluded in September Issue)

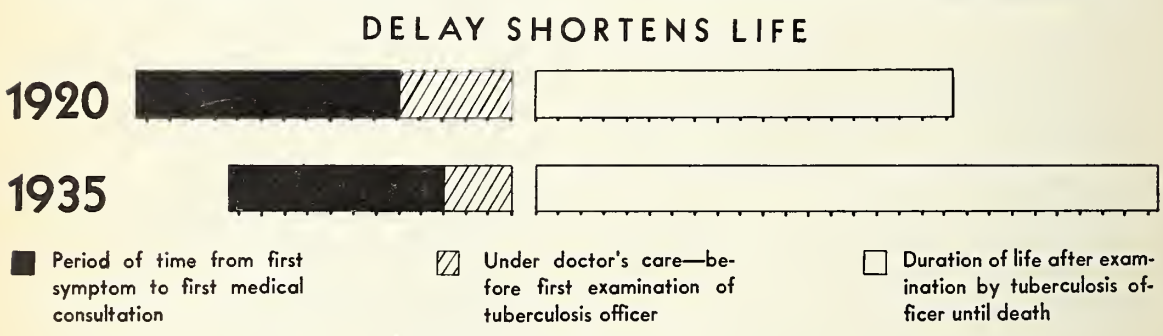
TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by the Compenent Society, the Ohio Public Health Association.

DURATION OF LIFE OF TUBERCULOSIS PATIENTS

The courage of tuberculosis workers ebbs from time to time because progress is so fitful and slow. A popular writer bemoans the great lag between what we, as a people, know and what we actually apply in the phrase, "the frustration of science". But that our efforts to improve conditions do ultimately yield fruit is attested by bits of evidence that come to light from time to time. Such evidence is furnished by a study reported by one of England's noted tuberculosis specialists, Dr. G. Lissant Cox. Excerpts of his article follow:

For many years efforts have been made in Lancashire (England) to educate the public to seek medical advice as soon as certain symptoms of tuberculosis manifest themselves. In an attempt to assess the value of such education the author, who is the Tuberculosis Officer of Lancashire, has measured the period of illness before the patient was examined for the first time by the Tuberculosis Officer and the duration of his life after that time. The period of illness before the Tuberculosis Officer's examination was sub-divided to show (a) how long the patient waited before consulting his medical attendant and (b) how long he remained under his care before being referred to the Tuberculosis Officer. Such measurements were made for two selected years, 1920 and 1935 and compared. More than 200 consecutive cases were included in each year's study.



The investigation was made only of patients who had died of tuberculosis, which limited the inquiry to the more advanced cases. To put the question of diagnosis beyond doubt, only cases with tubercle bacilli in the sputum were included. These restrictions naturally excluded the more hopeful types of cases. The conclusions reached were that:

1. The duration of illness, from the appearance of the first symptoms to consultation with the Tuberculosis Officer, averaged 16.7 months for the 1920 group and 12.5 months for the 1935 group.

2. This reduction of 4.2 months' delay was due to (a) earlier consultation with the family doctor and (b) more prompt reference of the patient to the Tuberculosis Officer.

3. The 1935 group lived on an average of 9.1 months longer than the 1920 group after the initial examination by the Tuberculosis Officer.

4. The longer duration of life may be due to (a) examination of the patient in an earlier stage, (b) better living conditions, (c) improved methods of treatment. It is not possible, however, to assess the value of modern methods of treatment as the investigation deals only with patients who died, taking no account of patients who are still under supervision or who have recovered.

5. Efforts to encourage patients to seek treatment earlier has met with some success. The average delay was reduced by some 25 per cent. —G. Lissant Cox, M.A., M.D. Cantab., The Medical Officer, April 16, 1938.

TUBERCULIN TEST OF SCHOOL CHILDREN

Ulster County (New York) has a population of 80,000, equally divided between urban and rural. In most rural schools several grades are grouped together and the ages of the pupils in a single grade may vary by as much as four years. It takes little more effort to survey a whole school than a class or two. For these reasons it was decided to apply the test to children of all ages and to offer the testing services to rural as well as urban groups. Furthermore, this case-finding survey had also propaganda purposes. It was a firm rule not to examine any grade school positive reactor unaccompanied by at least one responsible member of the family; in fact, efforts were made to examine all the household contacts. The

usual routine of educational preparation of the field through lectures and press propaganda was adhered to. The Mantoux test was used throughout.

The fluoroscope was used as a first screen instead of the X-ray film and this reduced the number of films to be taken between 85 per cent and 90 per cent. This net saving of about 60c per examination is of importance to most communities.

Out of a total of 11,446 students, ranging from grade school pupils to normal school freshmen, 1,964 reacted positively. (The authors submit tables of their findings both among the students and the adults examined.) The number of cases found among adults was 3.4 per cent—three times more than among pupils. Among the adult cases, 21 were minimal, 9 moderately advanced and one far advanced. Among the pupils, the cases were, 8 minimal, one moderately advanced and one far advanced. Taken together, 70 per cent of all cases found were in the minimal stage.

During the three-year period of the survey the hospital conducted bi-weekly clinics for contact and suspicious cases at which 1,843 new patients were examined and X-rayed. Of these, 227 new cases of tuberculosis were disclosed, classified as follows: 79 minimal, 76 moderately advanced, 72 far advanced. Thus 35 per cent of the cases were minimal as compared to 70 per cent minimal in the survey group.

It is evident that the numerical advantage rests with the contact-suspect-case examination method, but the tuberculin-test method leads to the discovery (on a percentage basis) of twice as many cases with minimal lesions. On the other hand, the routine clinic examination method yields a higher percentage of active lesions.

The tuberculin-test method is admittedly more expensive. But if the work is done by a full-time hospital staff which is already conducting a clinic, the extra expense is limited to the cost of X-ray films and a few incidentals.

A value which transcends the clinical aspects is the education of the public, which is a necessary part of the tuberculin-test method. A large proportion of the public are reached with the printed and spoken word because their interest has been aroused in the project. Examination of the parents brings them in personal touch with the doctors. The fluoroscope examination impresses family groups and helps them to understand the purpose of the examination.

The authors submitted a set of questions to senior high school students, many of whom had been tuberculin-tested or fluoroscoped but had had no lectures on the subject. The same questions were put to senior high school students in contiguous counties where practically no testing had been done. The students of the former group gave by far the best answers. To the question, "If you were fearful that you had pulmonary tuberculosis or 'lung troubles' what would be the best method of determining this?" 67 per cent of the students of the school where tests had been given answered correctly, as against 17 per cent correct answers of students in the other schools. —G. W. Weber, M.D., F. W. Holcomb, M.D., K. M. Murphy, New York State Journal of Medicine, Vol. 38, No. 9, May 1, 1938.

Diagnostic Maxims in Late Osseous Syphilis

(Modified from Stokes)

1. Routine serologic test in all patients with bone or joint symptoms (excluding fractures), especially "subacute or chronic infectious arthritis."
2. Examine patient completely—not only lesion. Look for associated skin lesions or scars.
3. Suspect tibial, skull, and shoulder girdle lesions.
4. Syphilitic bone pain is usually nocturnal.
5. X-ray indispensable in diagnosis but negative report does not exclude inflammatory lesions, especially early.
6. Do not operate or incise for diagnosis until serologic report is at hand.
7. Suspect syphilis in the "won't heal" syndrome, whether spontaneous ununited fracture, or after operative interference.
8. Suspect osteitis of the skull in severe nocturnal headache—X-ray the head before extirpating foci of infection.
9. Suspect Charcot joint in every "hypertrophic arthritis," especially of the knee.
10. Suspect early acquired or late congenital syphilis in bilateral hydrathrosis of ankles or knees.

A List of 33 Diseases

Which Early or Late Osseous Syphilis May Resemble.

Skull—Neurosyphilis, brain tumor, nephritis, hypertension, eye strain, sinus disease, focal infection, metastatic neoplasm, Paget's disease, xanthomatosis, multiple myeloma, tuberculosis, actinomycosis.

Naso-palatine bones—Nose picking, operative interference, chrome poisoning, neoplasm, tuberculosis, Vincent's angina.

Shoulder girdle—Tuberculosis neoplasm, aneurysm, angina pectoris, old fracture.

Long bones—Nonspecific periostitis, pyogenic osteomyelitis, tuberculosis, "neuritis," sarcoma, Paget's disease, ununited fracture.

Hands, feet—Tuberculosis, gout.

Joints—Infectious arthritis, trauma, tuberculosis, gonorrheal arthritis, housemaid's knee, hypertrophic arthritis.

Do a blood serologic test.—Supplement No. 5. Venereal Disease Inf., U.S.P.H.S.

CASE RECORD PRESENTING CLINICAL PROBLEMS

Boy, 12, unable to swallow; convulsions; death; autopsy.

By HARRY L. REINHART, M.D.

A TWELVE year old white boy was admitted to the Hospital with complaints of "inability to swallow" and to "move the left arm".

Three days prior to admission he arose complaining that his stomach felt upset. He ate little breakfast, developed a headache and appeared listless. The following day the headache was still present and he vomited four times. That evening he was seen by the family physician, who found no elevation of temperature and diagnosed the condition as an "upset stomach".

Later in the evening some stiffness of his neck was noticed, and the following morning he had difficulty in swallowing. The headache and stiffness of the neck persisted throughout the day and the evening he was again seen by his physician who gave him a "Diphtheria injection" as a prophylactic measure. By this time the child could swallow only when his nose was held. His temperature was 101° and he vomited occasionally.

On the day of his admission to the hospital the symptoms previously noted were confirmed and, in addition, definite weakness of the left arm was noted. He had no bowel movement since the onset of his illness.

P.H.—He had had scarlet fever with otitis media, mumps, chicken pox, measles and pertussis.

Physical Examination: Temperature 103^{8}. Pulse 120. Respiration 24. The patient was an acutely ill, extremely irritable and restless boy of 12 years, who was tossing about on the bed and talking with a nasal tone. The left pupil was larger than the right and reacted more sluggishly to light; accommodation was not impaired. There was no nystagmus. Ears and nose were negative. Inspection of the mouth revealed a great decrease in movement of the palate and uvula. The tongue was red and deviated slightly to the right. Moderate rigidity of the neck was present, forward motion causing pain. Examination of the lungs revealed no pathology. A loud, blowing, non-transmitted systolic murmur was present at the apex of the heart. The abdomen was not remarkable. Voluntary movement of the extremities was lost, and there was a marked diminution of the strength of the left arm.

The following definitely pathological reflexes were noted on admission,—biceps right diminished, left absent; triceps, right diminished, left absent; cremasteric normal, bilaterally; patellar normal, bilaterally; achilles right normal, left absent; plantar normal, bilaterally. The Kernig and Brudzinski signs were positive.

Blood: Hb. 21.2 gms., RBC 5,750,000; WBC 11,050; PMN. Seg. 75 per cent, Bands 6 per cent; Lymph 12 per cent; Mono 7 per cent. Urine: Specific Gravity 1.030; acid; alb. 100 mgm per cent; sugar negative; microscopic examination, 1 RBC/HPF; 3 WBC/HPF; 3 casts and epithelial cells/HPF. Spinal Fluid: Clear—colorless, 54 WBC and 13 RBC; Differential 36 per cent polys; 4 per cent lymphocytes; Globulin negative; Sugar normal; Colloidal Gold 1111110000.

Course In Hospital: The morning following his admission there was little change in the boy's condition, and during the day he was given a total of 70 cc. of Toomey's serum and 1,400 cc. saline. By 3:00 A.M. the following morning (second hospital day) the patient had developed severe convulsions every 15 to 30 minutes. The convulsions began with the head and involved particularly the right side of the body, occasionally being so severe as to flip the patient over on his side. The respirations were rapid and shallow. By 1:00 P.M. the biceps, triceps, cremasteric, patellar, aschilles and plantar reflexes were bilaterally absent and the patient was cyanotic. T. 104^{8}. P. 148. R. 40. The patient expired four hours later with a temperature of 108°, the recorded illness extending over six days.

Dr. E. H. Baxter: Commentator:

This twelve year old child as portrayed in the foregoing history has presented a characteristic picture of anterior poliomyelitis. The progress has been quite rapid with evidence of a marked involvement of the entire central nervous system. These two factors have made for a fatal outcome.

It is impossible in a short time to cover the various etiological diagnostic and therapeutic problems involved in this condition. However, it is well to emphasize a few of the pertinent points in connection with the case under discussion.

A typical case of an average duration of seven to twelve days, if observed closely, may present a dromedary stage of invasion with generalized symptoms to be followed by a symptomless period of varying length. Diagnosis during this time is difficult or impossible. There next appears the preparalytic stage with its train of symptoms indicating meningeal and gastro-intestinal irritation and pointing strongly and conclusively to the etiology. The clinical history of the patient under discussion begins with this period. Careful detailed investigation might have revealed the preceding periods. The nonparalytic or abortive cases of the disease go on to recovery at this point or earlier. This factor increases the difficulty of properly evaluating any therapeutic procedure.

The paralytic stage follows very closely, preceded, perhaps, by tenderness and tremor in the parts to be affected. The last stage, that of recovery, begins with complete cessation of tem-

This is the thirty-first of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

perature and muscle tenderness, and lasts as long as any nerve regeneration persists with return of muscle tone and function. Rapid return of function indicates little actual destruction of anterior horn cells but only a temporary loss of function due to an edema.

As the name implies, there is ordinarily an involvement of the cord; however, the medulla or the entire brain may be affected. This extension produces the bulbar and encephalitic forms. In such cases the name anterior polio-myelo-encephalitis is more accurate. The severity and extent of symptoms as well as the prognosis, depend on this factor of extension.

Infection of the brain stem is accompanied usually by respiratory embarrassment. This may occur as a result of paralysis of the respiratory muscles, such as the intercostals and diaphragm, paralysis of the pharynx with the resultant collection of mucus, food, etc., about the glottis, and by disturbance of nerve centers in the medulla. This patient presented "difficult swallowing" as an early symptom, while examination revealed decreased movement of the palate and uvula. Paralysis usually occurs later in diphtheria and is always preceded by a membrane. It may be assumed that this patient had a pharyngeal paralysis with involvement of the respiratory center.

Convulsions are rare in the course of infantile paralysis and when present, denote a meningo-encephalitis. This may be hemorrhagic. The severe convulsions, the irregularity of the pupils and the possibility of non-contaminating red cells in the spinal fluid indicated such a condition in this child.

The importance of suspecting children who show varying degrees of gastro-intestinal disturbance associated with some degree of listlessness or other evidence of meningeal irritation, as a possible case of infantile paralysis, is demonstrated here. It is not wise to arouse the fears of the laity by immediately voicing all suspicions, but the physician should be on the alert for any further corroborative evidence. This plan should be more closely followed during the period of greatest seasonal incidence, i.e., July, August and September.

Dr. Reinhart: Anatomic Diagnosis:

1. Acute anterior poliomyelitis. 2. Moderate edema of leptomeninges.

The clinical course, anatomic diagnosis and microscopic examination substantiate the diagnosis of acute anterior poliomyelitis or infantile paralysis. Although commonly called infantile paralysis, and predominantly a disease of young children (usually below the age of ten years), 95 per cent of the cases in epidemics are above one year of age.

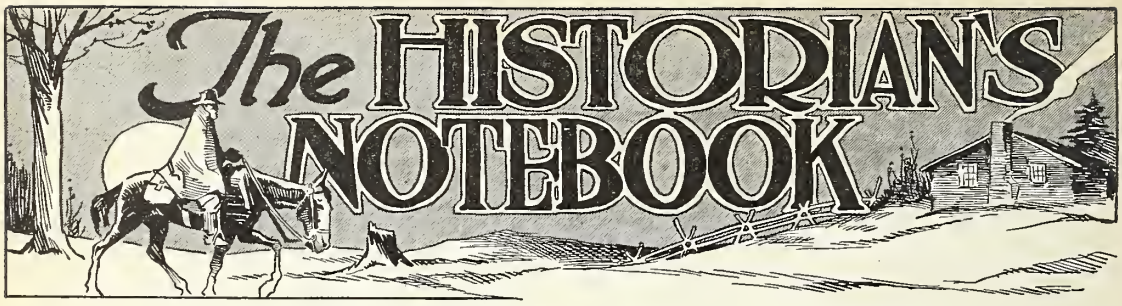
The seasonal incidence, coinciding with the harvesting of perishable fruit and vegetables, has led to the implication of these and in particular, fresh corn. The greatest practical importance of the seasonal incidence to the clinician is the fact that weakness or paralysis appearing suddenly in a child, without manifest cause, from the first of July until cold weather is most frequently due to anterior poliomyelitis.

The clinical laboratory examination of the cerebrospinal fluid, offers little of positive value in the diagnosis of anterior poliomyelitis. The greatest value of these examinations is in the elimination of other diseases of the central nervous system which may simulate anterior poliomyelitis, such as acute purulent meningitis, syphilitic and tuberculous meningitis and meningismus. Other conditions which may not be differentiated by spinal fluid examinations are brain abscess, benign lymphocytic meningitis and epidemic encephalitis. During the season of 1937 a mild epidemic of acute anterior poliomyelitis prevailed in this community. Sixteen cases were admitted to the hospital. There were five deaths due to this disease and three autopsies were conducted. The spinal fluid examinations revealed—from 5 to 70 cells per cu. mm. of fluid, predominantly polymorphonuclear leucocytes in the early stage. All other examinations, including smears and cultures, were negative.

Studies of the Greenland epidemic of 1932 suggested that immunity was conferred by both manifest and abortive attacks since those individuals who went through the 1914 epidemic had no symptoms during the 1932 epidemic. Infection from persons with manifest disease was considered insignificant. The incubation period was apparently from one to twenty days and a minimum quarantine period of six weeks was suggested. The highest percentage of fatalities was among the first cases which occurred.

Recent scientific investigations have been concerned with the mode of infection and extension of the virus to the central nervous system. As a result of the experimentally demonstrated extension along the nasal mucosa and olfactory tract, the zinc sulphate spray was introduced for the prevention of poliomyelitis. A recent report in the *Canadian Public Health Journal* does not consider this a practical Public Health procedure. Other investigations also raise the question as to whether the nasal mucosa is the only portal of entry of the virus of poliomyelitis.

We live in an era of specialization, but specialization can be overdone, and there is no inherent reason why the qualities of investigator, teacher and practitioner should not go hand in hand, be represented in a single individual and he be none worse for the mixture.—Harvey Cushing.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

SIDELIGHTS ON TWO FAMOUS PIONEER PHYSICIANS

By DONALD D. SHIRA, M.D., COLUMBUS, OHIO

THE more one delves into the life, writings and activities of Daniel Drake, that versatile colossus of western medicine at the dawn of the nineteenth century, the more one is impressed with the dynamic personality, the indefatigable zeal, the humanitarianism of the man. If for no other reasons, and there are many others, his "Picture of Cincinnati" and "Diseases of the Interior Valley of North America" place the stamp of genius upon him.

The following biographical sketch of Dr. William Goforth appeared in the *Liberty Hall* and *Cincinnati Gazette* just three weeks after Dr. Goforth's death. It will be remembered that Dr. Drake, an unlearned, unsophisticated country lad became an apprentice to Dr. Goforth at the age of fifteen years. A close bond of mutual respect existed between the two. While the obituary was submitted anonymously, in the judgment of one familiar with Dr. Drake's style, there should exist no doubt that he was the author of the article. Its seductive eloquence, its delicate emotionalism, the intimate knowledge of Dr. Goforth's life could hardly spring from any mind other than Drake's. Also it is doubtful if there lived at that time in Cincinnati any other person who could write so beautifully.

Author

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BIOGRAPHICAL SKETCH OF DR. WILLIAM GOFORTH*

Of the events inflicted on society by the hand of death, there are few which affect us more sensibly than the decease of our eminent physicians. The causes of this are numerous and well founded. Everyone, who has had the anguish of a painful disorder assuaged, or its fatal tendency averted, by medical skill, can readily understand why such crowds are found to swell the funeral procession of an old and respectable practitioner. It is not, however, an emotion of gratitude only that agitates us, on occasions of this sort. The death of such a man constitutes a public calamity, that is extensively felt and with difficulty repaired. A knowledge of the practice of physic is not to be obtained in the closet alone. It cannot be wholly derived from books, like grammar or mathematics; nor communicated entirely by teachers, like the dead languages or chemistry. Academic studies are, it is true, essentially necessary; but they are not all that is required; and long continued attendance on the sick, with patient observations on the phenomena of diseases and much profound reflection, are indispensable. When thus qualified a physician is justly regarded as an acquisition to society; and such was the excellent man whose name is prefixed to these imperfect notices.

Wm. Goforth was born in the City of New York in 1766, and about the year 1783 commenced the study of medicine under a very eminent physician, Dr. Joseph Young. While in this situation he had access to the best additional sources of medical information which that place then afforded, particularly to the surgical lectures of the celebrated M'Knight; and his application and industry were such as gave an earnest of his reputation. In the spring of 1788, being regarded by his preceptors as thoroughly versed in the elements of his profession, he departed, in company with the Rev. John Gano for Kentucky, whose fertility, beauty and mildness of climate were at that time the admiration of

*Liberty Hall & Cincinnati Gazette, Monday, June 2, 1817, Vol. XIII, No. 661, p. 2, Col. 4 & 5.

the whole U. S. Upon their arrival at Maysville he withdrew from the family of his friend (who proceeded to the interior) and established himself in the practice of physic at Washington; where he shortly afterwards married the daughter of the Rev. Wm. Wood. Devoting himself to his profession with zeal and benevolence, he soon became distinguished; and for a period of eleven years, had the gratification of being universally esteemed. The desire of enjoying the society of his paternal relatives at length induced him to emigrate to the state of Ohio, then the North West Territory, and in June, 1799, he landed at Columbia, and fixed his residence in the neighborhood of his father, the late and much lamented Judge Goforth.

In the following year, Dr. Richard Allison, whose skill and humanity will long secure for his memory the highest respect, fulfilled his determination of retiring from the practice and Dr. Goforth was earnestly solicited to succeed him. He accordingly removed to Cincinnati and immediately acquired an extensive practice; which, had his political feelings been governed by a cool circumspect prudence, would have rapidly increased. But a calculating discretion was never suffered to modify those actions which he conceived should flow from principle, as its legitimate effects, and the Doctor soon found himself embroiled in all the political struggles which attended our transition from a territorial to a state government.

Few things could have been more unfortunate for his professional interests than this ardent devotion to the Republican cause; and the reflection that he had been instrumental in facilitating the establishment of the new government, could have afforded but imperfect solace under the accumulated troubles, which a temporary neglect of his personal concerns and the loss of several wealthy patrons brought unexpectedly upon him. His practice being, from this cause, somewhat reduced, the Doctor, in the spring of 1803, resolved on a summary mode of extricating himself from pecuniary difficulty.

The project was well conceived, but badly executed; and in the end was attended with loss. The extraordinary collection of huge fossil bones at Big Bone Lick attracted his attention; and obtaining permission from the occupant, he spent more than two months in searching the morasses of that spot, and transporting to this place the curious remains which they contained. The collection was extensive and valuable; but not having the means of sending them either to the Atlantic or European cities, and being unwilling to sell them in this country as an inadequate price; they were kept on hand till the spring of 1806. At this time he inadvertently and unfortunately delivered them to the notorious traveler, "Thomas Ashe , Exquire", for exhibition in Europe. They were immediately taken to Great Britain, sold, in part at least, to the proprietor of the Liverpool Museum, and the proceeds embezzled.

In the following year, contrary to the advice and pressing solicitation of his friends, the Doctor resolved on emigrating to Louisiana. He stopped for a short time at Baton Rouge, then in possession of the Spanish government, where his professional prospects were good. His romantic ideas of liberty, however but ill prepared him for submission to inquisitorial power, and he continued his voyage to the Bayou La Fourche. Not long after establishing himself at this place he was favored by Governor Claiborne with the appointment of Parish Judge; the duties of which he discharged for four years. In the last year of this service he was elected to the Convention for forming the Constitution of the State of Louisiana. During his visit to New Orleans on this occasion he made arrangements for a removal thither; but on his return being urged by several respectable acquaintances, who resided in Attacapas, he altered his destination. Soon after his arrival on the coast he was again presented by the Governor with the office of Parish Judge; but that quarter disappointed his expectations, and in less than twelve months he left it for New Orleans. He was still there when the splendid repulse of the British Army was affected; and acted, during the invasion, as surgeon to one of the regiments of Louisiana militia. In 1816 having long been dissatisfied with the climate and state of society in that country; and feeling the anxiety which frequently attacks us after the meridian of life—the desire of returning to the land of our fathers and of our earlier years—he departed for this place with his family in a barge. His passage up was protracted to seven months, and attended with almost every circumstance that could embitter such an extraordinary voyage. He was joyfully received by his numerous friends on the first day of the present year, and the lapse of a very few weeks was sufficient to evince that the political feelings of former times had subsided, and that his practice would soon become lucrative and respectable. With these cheering prospects, and in the full enjoyment of the gratifications afforded by a more congenial state of society than that of Louisiana, he was seized in February, with an inflammation of the liver, which after great and various sufferings terminated, on the 12th of May, his useful and chequered life.

In the social relations generally, the deportment of Dr. Goforth was amiable and highly engaging. It was, indeeed, in the discharge of the social duties that he shone with the softest and steadiest lustre. Having its foundation in good temper and good sense, his politeness was

neither fitful nor sinister; it was a quality of his nature, and contributed equally to the pleasure of his friends and the gratification and cheerfulness of his patients. But his benevolence did not exhaust itself in his manners. It was, emphatically, the master spring of all his actions, and never lost its elasticity. No man was more practically charitable in proportion to his means; and none more regardless of his own comfort and interests while dispensing to the benefit and happiness of others. The number of sufferers to whom, in the long course of twenty-eight years, he administered gratuitous relief, was immense, and not unjustly entitles him, in this respect, to rank in the same class with Sydenham, Fothergill, and Rush.

In his profession Dr. Goforth was eminently practical; and no physician, perhaps, in the Western country has treated successfully a greater number and variety of cases. It was, however, in the diseases of the infirm and aged, in complaints requiring for their removal a stimulating and restorative course, that he particularly excelled. His political principles, as already intimated, were firm, sanguine and liberal; perfectly accordant with the spirit of our republican institutions, and unaccompanied with selfish or interested views. As the reader of discernment must have already inferred, the Doctor spent a life of pecuniary embarrassment, and died in straitened circumstances. In vain did he uniformly experience a liberal patronage, and industriously prosecute the business of his profession. His labors gave health and comfort to others, but uniformly failed in securing a competence to himself and family. He was too indiscriminate in his charity not to relinquish a large portion of his earnings to those who were either poor or affected poverty. But this was not the only outlet to the proceeds of his industry. Honest and sincere himself, he seldom suspected the profession of others, and seemed almost incapable of realizing by experience that a man may smile and smile and be a villain. He was therefore the subject of frequent impositions by designing men who insidiously approached him under the mask of friendship, and were in general but too successful in their villainous schemes.

The Doctor's native love of society gave him an exquisite relish for Masonry; and he was repeatedly heard to declare that some of the happiest hours of his life had been spent in the Lodge.

Long before his death he attained to the highest grades of knowledge and distinction in that venerable institution, and was at all times a most exemplary member. He was moreover a steadfast believer in the truths of our holy religion, and ranked among the most agreeable circumstances connected with his return to this place, the opportunities which it affords of hearing the Gospel in its native purity. It was his desire to be interred with Masonic honors, these were accordingly superadded to the Christian ceremonials, and executed in a manner that perfectly corresponded with the great respect evinced by society.

CINCINNATI, MAY 20, 1817.

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The Committee on Medical History and Archives of the Ohio State Archaeological and Historical Society will welcome anything relating to the practice of medicine, including dentistry, pharmacy, nursing and like activities, books, reprints, transactions, instruments, prescriptions, account books, saddle bags, instrument cases, diplomas, letters, diaries, genealogies and photographs.

Contributions should be sent to Jonathan Forman, M.D., chairman of the Committee, care of the Ohio State Archaeological and Historical Society, Museum, Ohio State University Campus, North High St., Columbus, Ohio. Such contributions will be properly and permanently preserved in the Museum of the Society.

READ 'EM AND WEEP

Read 'em and weep. That must have been what medical students way back yonder did when they read over the list of ponderous tomes prescribed for them by the first medical convention of Ohio held in Columbus, June 4, 1821. One is tempted to speculate as to the familiarity of the august convention members themselves, with the formidable array, not to mention Greek, Latin and "Mechanical Philosophy". No doubt it gave "the faculty" considerable satisfaction as well as an added sense of dignity thus to impress upon the humble neophytes the profundity of their wisdom.

The following account of the proceedings of that historic convention, copied from the *Columbus Gazette*, appeared in the *Franklin Chronicle*, Worthington, Ohio, Monday, July 2, 1821, Vol. II, No. 76, p. 4, Col. 1, 2 & 3. Allowance should be made for typographical errors because the titles, and names of authors, were no doubt as unintelligible to the poor printer as to the future practitioners of physic and surgery.

It will be noticed that John Edmiston, M.D., the first physician to settle in Columbus, was president of the convention, while Jesse Smith, M.D., one of the two conspirators who expelled

Dr. Drake from the Medical College of Ohio, was its secretary.

MEDICAL CONVENTION OF OHIO

The meeting of the first general Medical Convention of Ohio, was held in this town on the 4th inst. agreeable to the provisions of the statue; and was composed of a majority of all the delegates throughout the state.

The following is extracted from its records for the benefit of those immediately concerned, and as interesting to the community.—*Col. Gazette.*

Upon the subject of qualifications of candidates for the practice of Physic and Surgery and the periods of study conditionally required, it was unanimously Voted: That each and every candidate exhibit satisfactory testimony in writing, of his having sustained a good moral character. That any person, who shall exhibit, in writing satisfactory testimonials of a competent acquaintance with the Greek and Latin languages, of being well informed in Mechanical Philosophy, of having read the various branches of the Profession, with, and attended practice of some regularly educated and reputable practitioner for the term of two years; and who shall have read and studied the books herein-after specified as required; or shall have obtained the information contained in them, and also shall have attended one course of Medical Lectures on all the branches taught in some respectable Medical Institution, may become a candidate for a Medical license.

That each and every person who is not acquainted with the Greek and Latin language, and has not attended Medical Lectures, though he may be qualified, as to the other requisitions before stated, shall have read and studied the Profession as before prescribed, with some regularly educated and respectable Practitioner for, a term *not less* than three years before admission to examination as a candidate for practice.

Voted: That it be required of every candidate to have obtained the information contained in the following works, and that they may be adopted as text books in the examination of candidates, viz:

On Anatomy—Wistar's Anatomy, Monro's or the Edenburgh system, and Bailie's Morbid Anatomy.

On Physiology—Richerand's system, and Thompson's on Inflamation or Hunter on the blood, ect.

On Surgery—Dorsey's Elements of Surgery, and Cooper's Surgical Dictionary.

On the Theory and Practice of Medicine—Cullen's Practice. Rush's Medical Inquiries and Observations. Thomas's Practice. Philips (formerly Wilson) on Febrile Diseases, and Underwood on Diseases of Children.

On Midwifery—Denman's System or James's Burns.

On Chemistry—Henry's Chemistry, and Park's Chemical Catechism (last edit.)

On Materia Medicine—Murry's system, and some approved Dispensitory. Though the following books be not required for examination, the Convention would recommend the careful perusal of as many of them as may be practicable.

On Anatomy and Physiology—John and Charles Bell's system of Anatomy, Fyfe's Anatomy, with the plates of these authors. London Dissector. Haller's Physiology. Bichat on Life and Death. Bichat on the Membranes. Cuvier's Comparative Anatomy. Blumenbach's Physiology. Hunter on the Animal Aeconomy. Hewson, Sheldon, and Cruickshank on the Absorbent System.

On Surgery and Obstetricks—Gooper's Surgery, Pearson's (John). Principles of Surgery. Burn's Surgical Anatomy of the head and neck. Abernathy's Works. Pott's Chirurgical Works. Ben. John, Charles Bell's System of Surgery. Boyer's Surgery. Desault's Surgery. Larry's Memoirs. Bell and Hunter on the Venereal. Home on Strictures and on Ulcers. Jones on Hemorrhage. Scarpa, Ware Adams, and Saunders on the Eye. Saunders on the Ear. Fox on the Teeth. Scarpa, (Wishart's) Cooper, (Astely) and Lawrence on Hernia. Travers on the Intestines. Crowther on White Swelling. Hodgson on the Arteries and Veins. Copeland on the Rectum. Cooper's (Astely) and Traverse's Surgical Essays.—Bard's Midwifery (last edition). Mersiman's Synopsis. Smellie, Bondeloque, and Hamilton's Systems of Midwifery. Gordon, Hey, and Armstrong on the Puerperal Fever.

On Chemistry, Pharmacy, and Materia Medica—Thompson's Chemistry, Murry's Chemistry. National Pharmacopoea. Cullen's Materia Medica. Pearson's Materia Medica. Chapman's Materia Medica and Therapeutics. Bigelow's and Barton's Medical Botany.

On Pathology and Therapeutics—Good's Physological System of Nosology. Young's Medical Literature. Hall on Diagnosis. Burseriu's Instatues of Medicine. Sydenham's Works. Morgagni on the seats and causes of Disease. Parry's Elements of Therapeutics. Cheyne's Essays on Disease of Children. Currie on cold water. Armtrong Illustration of Typhus. Herberden's Commentaries. Fordyce on Fever. Allibert on Intermitents. Bancrofts on Yellow Fever and Contagion.—Johnson on Diseases of

hot climates. Robert Jackson on the Medical Department of Armies. Blane on Diseases of seamen. Blackall on dropsies. Cheyne on Apoplexy, Lethargy, ect. Arnold, Crichton, Pinelle, Haslam, Cox and Rush on the Diseases of the Mind. Bree on Disordered Respiration. Corvissart, Burns, and Davis on diseases of the Heart. M'Lean on Hydrothorax. Young and Ducan on Consumption, Sutton on Delirum Tremens. Scudamore on Gout and Rheumatism. Pemberton on the Abdominal Viscera. Saunders on the Liver. Harty on Dysentary. Hamilton on Purgatives. Brera on Vermineous Diseases. Adams on Morbid Poisons. Willan and Bateman on Cutaneous Diseases, with the Plates. Ferriar's Medical Histories and Deflections. Coopers selected Tracts on Medical Jurisprudence. Gregory on the Duties and Qualifications of a Physician. Edenburgh Medical Essays. Duncan's Medical Commentaries. Medica Chirurgical Transactions. London Medical and Physical Journal. Edenburgh Medical and Surgical Journal. New York Medical Repository. New England Journal of Medicine and Surgery. American Medical Recorder. Electric Repository. Hooper, Parr, or the Edenburgh Medical Dictionary.

It also voted: That the members of the several Boards of Censors' who are required annually to vacate their seats, be determined by ballot in a meeting of each Board: and, if the seats to be vacated be not thus determined by any Board, the office of the three first named on the list of appointments, shall terminate with the current year from their election.

John Edmiston, M.D., Pres't.

Jesse Smith, M.D., Secy.

Contributes to History Committee

Dr. Frederick C. Waite, Cleveland, has presented reprints of the following historical articles, of which he is the author, to the Ohio Medical History Committee of the Ohio State Archaeological and Historical Society, Columbus: "The Second Medical School in Ohio at Worthington, 1830-40"; "A Contract for Private Medical Teaching in Northern Ohio in 1846"; "Medical Degrees Conferred in the American Colonies and in the United States in the Eighteenth Century"; "Significant Dates in the History of the School of Medicine, Western Reserve University"; "The Degree of Bachelor of Medicine in the American Colonies and the United States"; "An Early American Poem on Dentistry". The book, "An Improved System of Botanic Medicine", by Horton Howard, Columbus, Ohio, 1836, has been purchased by the Committee.

Gift to State Historical Society

Dr. George F. Zinninger, Canton, recently presented to the Ohio Medical History Committee of the Ohio State Archaeological and Historical Society, a complete set of the Transactions of the Ohio State Medical Society from its organization in 1846 to the close of its last session in 1850.

Cleveland Museum Receives Gifts

Recent donors to the Museum of the Cleveland Medical Library Association include: Dr. Harold N. Cole, a specimen in its original package, which was transported to this country by the submarine "Deutschland", just before it was torpedoed in the World War; Dr. E. H. Cushing, 11 hand blown glass bottles, all of the same design and with the old labels attached; Geggenheimer Drug Co., two bottles of the same design as those presented by Dr. Cushing, and Dr. Paul G. Moore, a hand-blown glass display jar.

Ohio Allergists Meet

The Ohio Valley Society of Allergists held its Spring meeting in Cincinnati at the Hotel Gibson, May 21 and 22. The meeting was given over to the discusison of fungi. Dr. Sam Feinberg, of Chicago, led the discussion, which was continued by Dr. F. W. Wittich, Minneapolis; Dr. John M. Sheldon, Ann Arbor; Dr. Karl D. Figley, Toledo, and the members of the society.

Fund to Aid Medical Student

Dr. Torald Sollmann, dean of the School of Medicine of Western Reserve University, has announced that the Alumni Association has transferred the Charles F. Hoover Memorial Fund to Western Reserve University "so that the income amounting at present to $350, may be awarded annually to an outstanding student in the School of Medicine as an honor-scholarship, to perpetuate the memory of Dr. Hoover's work in this school".

The fund was contributed by friends and pupils of Dr. Charles F. Hoover, professor of medicine at Western Reserve University, from 1909 until his death, June 14, 1927.

Alfred Humphrey Hill, Ashtabula, the ranking member of this year's graduating class, will receive the scholarship this year. He will intern in medicine at University Hospital, Cleveland. Hill, who is president of his class, also won the Eliot C. Cutler prize in surgery.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

HEALTH INSURANCE MAY BE 1938 CAMPAIGN ISSUE, SAYS WASHINGTON CORRESPONDENT; WHAT ARE YOU GOING TO DO ABOUT IT?

IN our opinion there has never been a time when there has been greater need for active participation in politics on the part of members of the medical profession than the present.

We are not advocating party politics but the kind of politics which takes into consideration the qualifications of candidates of both parties and their views on some of the vital questions having a direct bearing on public health and medical practice.

Permit us to ask you this personal question, Doctor: **Do you believe it is important and necessary for you to check up on the candidates for the Congress of the United States from your district and the state at large; find out how they stand on proposals which would turn the practice of medicine into a bureaucratic, government-controlled activity; and give your active support to candidates who are opposed to such theories and programs?**

After reading the following article by Rodney Dutcher, special Washington correspondent for the Scripps-Howard Newspapers, and published on July 6 in those papers, you may agree with us that it is time for physicians of Ohio to get busy and **have a show-down with those who are seeking seats in the next Congress.** See the candidates for Congress from your district immediately. Find out where they stand on these questions. Act accordingly.

* * *

"WASHINGTON, July 6.—Health insurance and adequate medical care for everybody are likely to become 1938 New Deal campaign issues.

"A federal-state program providing for compulsory insurance against sickness costs and widespread expansion of public medical services will be proposed to the National Health Conference, meeting here soon, by the technical committee of the President's Interdepartmental Committee to Co-Ordinate Health and Welfare Activities. The proposals will be aimed at rounding out the social security program. A continuing body growing out of the conference will formulate a legislative program for the President and Congress within the next few months.

"New Dealers have in mind a grant-in-aid plan which would encourage states to set up their own health insurance schemes within certain federal standards, the federal and state governments to contribute funds to the general program in each co-operating state. Health insurance systems to be supported by payroll contributions would go side by side with arrangements, especially in rural areas, for setting up new public health services by taxation and local contributions.

"The President, Chairman Josephine Roche of the Interdepartmental Committee and various committee members are convinced that there's a huge public demand for insurance against hazards of illness and disability and that this will become articulate once the public realizes something might be done about it. Hence the probability that the proposed national health program will be talked up by New Deal candidates during the campaign season.

"About 4½ per cent of wages would be needed to insure masses of individuals against economic loss due to health hazards, it is estimated, and that's about the percentage which wage and salary earners on the average now pay for medical costs. The idea is to distribute the burden evenly.

"Insurance against wage losses, it is proposed, should be paralleled or combined with the existing federal-state unemployment insurance sys-

tem. Comprehensive proposals will be made for provision of medical care for relief families and very low income families who couldn't afford to pay for health insurance. The technical committee found from one-third to one-half of American families couldn't afford to pay for adequate medical care on any basis. It has also estimated that the country needs between one and two billion dollars of new hospital construction and the committee will make concrete proposals to do something about that."

No man can continuously follow a routine of business or professional demands without relaxation, and keep fit for the duties devolving upon him.—Northwest Medicine.

Shall Medicine Be Practiced In Hospitals or By Hospitals?

On July 18, 1938, the Board of Trustees of the American Hospital Association adopted a statement, the significance of which is apparent to the careful reader, reading as follows:

"The American Hospital Association declares the following principles of relationship between medical practice and hospital care:

"1. The primary obligation of the hospital is to provide and organize all the services necessary for the diagnosis, treatment, and rehabilitation of the patient.

"2. Provision of medical service in hospitals is part of the responsibility of the hospital, and is consistent with the rights, privileges, and obligations of hospital staff physicians under their medical licensure. The performance of diagnostic and therapeutic procedures by staff members constitutes the practice of medicine in hospitals. It is not the practice of medicine by hospitals.

"3. The employment of a physician by a hospital is consistent with law and with professional ethics and does not imply that the hospital is engaged in the practice of medicine.

"4. The financial arrangement between a hospital and a physician is not a determining factor in the ethics or legality of medical practice in hospitals.

"5. No one basis of remuneration of a physician is applicable or suitable in all instances, nor should any such arrangement permit the hospital or the physician to exploit the other or the patient.

"6. The medical work of physicians is coordinated through existing hospital staff relationships, resulting in higher quality of medical care, greater efficiency in hospital service, and lower cost to the patient.

"7. The responsibility for providing adequate and economical hospital care for the American people is not the responsibility of hospital trustees and administrators alone, but calls also for the participation of hospital medical staffs and of the entire medical profession."

This statement of principles may not have been meant as such but it can be construed to be an ultimatum and challenge to the medical profession. To us it sounds very much as if hospital leaders are saying: "We stand for this; we are going to do things this way. So what?" Well, what is the medical profession going to do about it?

It is suggested that each physician ask himself these questions, the answers to which may make him realize that it is about time for some kind of direct action.

Is the primary obligation of the hospital "to provide and organize" all the services necessary for the diagnosis, treatment and rehabilitation of the patient or to provide facilities and equipment which can be used by practitioners of medicine as adjuncts to the diagnosis, treatment and rehabilitation of the patient? In other words, is the hospital an end or only a means to an end in the furnishing of medical services?

If the performance of diagnostic and therapeutic procedures by staff members is controlled and dominated by hospital authorities, is that "the practice of medicine in hospitals" or is it "the practice of medicine by hospitals"? Under such circumstances, is the physician a private professional contractor or does he become the agent of the corporation, subject to its will and whims?

When a physician voluntarily or by compulsion contracts with a hospital to perform certain services on a salary, commission or division-of-fees basis so as to permit profits to accrue to the institution is he or is he not violating Section 5 of Article 6 of the Principles of Medical Ethics, reading in part as follows:

"It is unprofessional for a physician to dispose of his professional attainments or services to any lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit a direct profit from the fees, salary or compensation received to accrue to the lay body or individual employing him."

Is there one code of ethics governing the practice of medicine outside hospitals and another code governing practice within such institutions?

Is not "financial arrangement between a hospital and a physician" an important factor in what is or is not ethical when such financial arrangement is responsible for procedure which is beneath the dignity of professional practice, is harmful alike to the profession of medicine and the welfare of the people, and, therefore is against sound public policy?

If the hospital provides medical services illegally, controls and dictates medical procedures within the institution, and profits through the financial arrangements made with its physician-employes is it or is it not "exploiting" such physicians as well as patients confined therein?

Even though a hospital may be on safe ground legally can it afford to countenance practices and

arrangements which lower professional standards and cause violation of professional ethics?

How can "higher quality of medical care, greater efficiency in hospital service, and lower cost to the patient," be maintained under conditions which tend to disrupt the proper relationship between medical staff and administrative agency and where antagonism bred through exploitation retards mutual understanding?

What is there to prevent proper coordination of medical and hospital services even if a hospital recognizes that there is a dividing line between medical services and hospital services and follows that policy?

Does inclusion of medical services in the sale of hospital service prohibit free choice of physician and alter the personal relationship between patient and physician?

Can a hospital continue to sell the services of a physician as a part of hospital services if physicians refuse to render services under such conditions?

The above questions are asked for the purpose of stimulating thought on the part of every physician. They are not aimed at all hospitals —far from it. In many hospitals relationships between staff and administrator are harmonious and there are no misunderstandings because those institutions are careful to avoid procedures which would tend to disrupt the work of the medical staff or violate fundamental principles of medical practice. Nevertheless, the statement issued by the American Hospital Association, in our opinion, conflicts in several respects with the policies and principles promulgated by the House of Delegates of the American Medical Association. We believe the policies and principles endorsed by the A.M.A. are sound and a protection of the rights of the patient. Steps to clarify and adjust this situation should be taken immediately. Every physician who holds a hospital staff appointment has a stake in the outcome—the surgeon, the internist and the specialist just as much as the pathologist, the anesthetist and the roentgenologist who at present are a little closer to the firing line, as it were, than other specialists.

Character is long standing habit.—Plutarch.

Sound Policy in Ohio Re Venereal Diseases Should Be Continued

Under the LaFollette-Bullwinkle Act authorizing the U. S. Public Health Service to allocate additional Federal money to the states to promote the control and eradication of venereal diseases, Ohio will receive $110,784 additional during the ensuing year.

It is indicated by State Director of Health Hartung that this money will be used to strengthen existing facilities, especially in cities, where the demand and need for venereal disease services are greater than in rural areas. Efforts will be concentrated on building up facilities which have been operated efficiently and not toward establishing new ones. Also, part of the money will be used to enlarge the supply of drugs which is furnished by the State Department of Health to physicians treating and reporting venereal disease cases. Receipt of this additional amount of money may enable the department to be a bit more generous in paying physicians in rural communities for services to patients suffering from venereal disease who are unable to meet such expenses.

This, in our opinion, is a sound policy. In fact, we believe that the State Department of Health has used its head from the beginning with respect to its handling of the venereal disease program. It has moved slowly but has progressed. It has attempted to avoid mistakes. It has worked through county medical societies. It has endeavored to win the cooperation and good will of physicians by being careful not to initiate procedures which would create antagonism. Physicians should reciprocate by cooperating with the department on the matter of reporting and in rendering efficient services.

It is not unscientific, as some scientists seem to believe, for even a scientist to make his meaning clear.—Albert E. Wiggam.

Poll Shows Where Physicians Stand But What About the Public?

The publication *Modern Medicine* has announced the result of its recent poll of physicians on the question of socialized medicine.

A total of 16,711 ballots were cast by physicians throughout the country. Ballots cast in Ohio numbered 1,064.

Votes on the four questions asked for the entire 16,711 physicians participating and for Ohio follow:

No. 1. Do you believe that reorganization of medical service is necessary to make adequate medical care available to all classes of the U. S. population? **Nation:** 32 per cent yes; 67 per cent no; 1 per cent no reply. **Ohio:** 30 per cent yes; 60 per cent no; 10 per cent no reply.

No. 2. Do you think that the cost of providing adequate medical care for the medically indigent and the low income group (families with incomes below $1,500 a year) should be met with public funds (local and /or state and /or Federal)? **Nation:** 54 per cent yes; 44 per cent no; 2 per cent no reply. **Ohio:** 53 per cent yes; 44 per cent no; 3 per cent no reply. (The word "Federal"

was crossed out on many cards indicating a dislike for Federal Government participation.)

No. 3. Do you approve of the present policy of the American Medical Association in studying all plans for the wider distribution of a high standard of medical care with the view toward helping each community to solve the problem and administer a program for itself? **Nation:** 84 per cent yes; 15 per cent no; 1 per cent no reply. **Ohio:** 84 per cent yes; 15 per cent no; 1 per cent no reply.

No. 4. Do you know of any case in your community where an individual or family, claiming inability to pay, has been refused whatever medical care a physician himself could provide? **Nation:** 9 per cent yes; 90 per cent no; 1 per cent no reply. No breakdown by states. (Many of those voting with the 9 per cent cited instances where the claim of inability to pay was known to be false.)

Here is another example of how and where the medical profession—at least a large majority—stands on the question of government control and domination. We are not greatly surprised at this and results of similar polls among the profession for physicians more than any other group are keenly aware of the evils certain to follow complete socialization of medicine. The big question is: How to show the public and how to induce the public to cast its vote on the negative side, for in the final analysis the public will make the decision. The public will not be warned in time unless the medical profession assumes the responsibility for doing so. This is the obligation which falls on each physician who believes the public would suffer under govermental medicine.

Consume your own smoke with an extra draught of hard work, so that those about you may not be annoyed with the dust and soot of your complaints.—Osler.

Stark County Medical Society Doing Things and Going Places

There's a whale of a difference between medical societies. Some societies go in strong for the social side, subordinating scientific programs and business affairs. Others neglect the social side which helps to create good fellowship and helps the members to get better acquainted. Still others concentrate on good fellowship and the scientific side but forget that there are many serious social and economic questions which should be discussed by the profession.

Whenever a society can include all three of these necessary factors in its program of activities, that society is making itself a useful agent for its members. Such a society is the Stark County Medical Society. Of course, there are many others in Ohio but we use the Stark County society as an example because we had the chance recently to review some of its current activities and plans.

Among other things, that society

Is discussing the possibility of establishing a full-time executive office and secretary.

Is planning for a Postgraduate Day program in the Fall.

Has held regular monthly meetings with good scientific programs plus a little golf on the side, in addition to its traditional Summer outing and picnic at Congress Lake.

Has adopted a definite policy with respect to physical examinations of pre-school children, offering cooperation on a physician-patient basis but condemning mass examinations and wholesale clinics.

Has warned physicians engaged in so-called lodge practice that such practice is unprofessional and a violation of the Principles of Medical Ethics.

Has taken a stand in favor of physicians charging $2.00 for filling out insurance blanks and for doing other paper work similar in character for insurance companies.

Has worked out with officials of the Division of Aid to Dependent Children a satisfactory medical program and fee schedule.

Is co-sponsor of a local group hospitalization program.

Is pushing the A.M.A. Study of Medical Care in Stark County through a special committee, with exceptionally good results to date.

When a society tackles such problems and shows as much initiative during "dog days", one is compelled to observe that it must have plenty of stuff and good leadership. No doubt there are some societies in Ohio which can say: "We're just as good as Stark County". By the same token there may be societies in Ohio which should

ARE YOU PREPARED?

It is the patriotic duty of every physician to vote in the party primaries on August 9.

It is only common sense for each physician to investigate the records and qualifications of all candidates before he casts his vote.

Ask your legislative committeeman or committee about candidates before you go to the polls. Investigate! Be prepared to vote intelligently.

hang their heads in shame for not being as good although they have the potential talent to make them as good—maybe better.

To study the phenomena of disease without books is to sail an uncharted sea; while to study books without patients is not to go to sea at all.—Osler.

The following letters published in the "Letters to the Editor" department of *The Columbus Academy of Medicine Bulletin*—one in the June issue and the other in the July issue—present both sides of the issue of state and federalized medicine from the viewpoint of the practicing physician. Read them carefully. Which of the two plans, in your opinion, assures the public of competent, adequate medical care and the physician of "restful sleep that comes as a reward for a day's work honorably discharged"?

* * *

Editor of the Bulletin:

"If You Don't Favor State Medicine, What Do You Favor?"

The recent meeting of the Ohio State Medical Association witnessed one more splurging of the newspapers with a condemnation of state and federal medicine.

Just what good does this do, anyhow? Do physicians really believe that the lack of liaison between need and service can go on forever? One year ago the situation was certainly not satisfactory; but since that time, the practice of most of us has dropped off horribly—perhaps half. Does anyone suggest that there has been a 50 per cent decrease in medical needs in that time? If not, does he approve as a matter of principle, the lack of medical care for the needy?

One group which in recent years has dared to stand up for the underprivileged (the Committee of 400) has been exorcised because most of its members are living on comfortable state jobs. It seems to me that it is every bit as true that the policy makers of the old conservative faction are those men who, through hardened unnatural ethics, are profiting by the channelizing of medicine. By this we mean that it is becoming more and more customary for patients to seek hospitals and medical centers and in each of these, certain men selfishly grasp everything in sight. The surgeons, for example, who depend for their livelihood on the cooperation of the general practitioner, would be scandalized if that practitioner were allowed to so much as dab a bit of iodine on an industrial finger case; for that is the surgeon's prerogative and he is well satisfied with the status quo, seeing no ethical problem in such headless opportunism.

The aims of this group might be expressed in quoting a little Chinese poem:

> "There is the wisdom of the foolish,
> The gracefulness of the slow,
> The subtlety of stupidity,
> The advantage of lying low."

It seems so obvious that the old system will no longer work that we may well ask, **"If you don't favor State Medicine, what do you favor?"**

With the world on the march, it is high time that some of us at least discuss these movements. If we must have medical fascism to solve these problems, let it come!

If the profession has any new contributions aimed at bringing doctor and patient together again, I want to hear them—quickly; if not, state medicine is inevitable, and we might as well get on with it.

—*Interested.*

* * *

Editor of the Bulletin:

"I Should Like to Continue to Be Able to Hold My Head High"

A correspondent raises the question in the June issue about the organized Medical Profession's attitude on State Medicine. It seems to me that he expressed the headlong attitude of youth, the deplorable, prevalent, ill-thought-out policy that is now gnawing dangerously at our vitals.

We must do something about everything. Nothing must be left unchanged, no institution unreformed. To these restless souls it seemingly matters little whether the change is for better or for worse—that is a mere trifling, annoying, insignificant detail—the change is the thing.

First of all, give us proof that there are deserving people actually suffering for want of proper medical care because they cannot afford it, and second, prove to us that some other method than the present one will be an improvement—and not just a change.

I'm sick of hearing about the forgotten man, the underprivileged, the new deal. I'm beginning to suspect that these are the shibboleths of demagogues and reformers, those slightly maniacal zealots that would save us from the frying pan by kicking us into the fire.

Give me some of the old deal. The forgotten man, having had a taste of being remembered, would love to be forgotten again—forgotten by the tax collector and the regimenter. The erstwhile underprivileged will gladly yield the privilege of being dictated to at their own expense, and if ever our beneficent and paternalistic government should, through the intervention of God, decide to restore to us some of our fundamental liberties, it is to be hoped that we will bear them with fortitude.

"Interested" asks us, if we don't want State Medicine, what do we want. Well, I for one want to be left alone. I should like to continue to be able to hold my head high, to remain free of the domination of bureaucratic politicians, to see rugged individualism restored to its rightful place as a highly commendable virtue instead of a term of opprobrium applied by little men who speak with Envy's voice at Virtue's pitch. I should like to maintain the privilege, inherent in the world's noblest profession, of seeing my patients get the care they need and are entitled to irrespective of their ability to pay, and I should like to settle this matter with them privately without the intervention of professional snoopers. I want to care for some people for a reduced fee, and for some for no fee at all because I want my profession to remain a profession and my relation to my patients to continue to be an open-hearted, warm, friendly, personal relationship and not a cold, calculated, mercenary one. I want the right to nurture my pride and self-respect on a little overwork and a little

sacrifice. I will cheerfully abide long hours and occasional ingratitude in exchange for the restful sleep that comes as a reward for a day's task honorably discharged. Then, if such a manner of living exhausts me before I have reached senility and incompetence and dependence, I shall have no regrets if I can pass on to my son the mantle of an undegraded profession that offers an opportunity for service without servility, and a reasonable livelihood in exchange for sustained, conscientious, and honorable effort.

Charles W. Pavey, M.D.

One of the unequivocal blessings of a really good education is that it spurs the mind on to a sublime and enduring discontent with any particular stage of achievement and inspires men, contemptuous of advancing years, to strive for ever wider vision, for continued victories over new territory.—James Rowland Angell.

Medicine Not Static; That's Why Postgraduate Sessions Are Needed

Starting in September the Committee on Education and the Sub-Committee on Regional Postgraduate Lectures, with the approval of The Council, will sponsor three additional series of Ohio State Medical Association Regional Postgraduate Lectures like those presented so successfully last Winter and Spring in Northwestern Ohio and South-Central Ohio. Centers for the lectures will be Mansfield, Region C; Zanesville, Region D; and Dayton-Springfield, Region E. With the completion of these three series about four-fifths of the state will have been covered by this refresher course project.

Because members in the counties surrounding Mansfield, Zanesville and Dayton-Springfield should be looking forward with pleasure and interest to participating in this beneficial activity of the State Association, the comments regarding postgraduate study in general voiced by Dr. William M. Skipp, Councilor of the Sixth District, in an article in a recent issue of *The Stark County Medical Society Bulletin*, are exceptionally appropriate. Said Dr. Skipp in part:

"The practice of medicine moves forward by leaps and bounds. The busy practitioner finds it exceedingly hard to keep up with the times because of the mass of new methods of diagnosis and treatment.

"Treatment of disease is simple, it has been said, if the diagnosis is made, but with the newer methods and discoveries, treatment is not so simple. It therefore behooves the practitioner of medicine to be continually on his toes, reading, attending meetings, going to clinics, so that he may better practice the healing art.

"To aid the busy man, the state district and county society are bringing to him teachers from the medical centers and thus making it possible for him to receive in a short period of time all that has been recently advanced in both diagnosis and treatment. He therefore does not have to be away from his practice but a few hours, the expense is small, and when the fee charged is considered, he could not receive the same amount of training for many, many times that amount, not considering the amount lost in being absent from his practice.

"Each member of any county society who does not avail himself of the opportunity to attend a group meeting, which is called a postgraduate assembly, will be the loser to an extent that he cannot estimate.

"We must recognize the fact that our patients realize that this type of study whether at home or at some distant place, is for their benefit; that they will be brought back to health more quickly; they expect him to keep up with the times and progress with medicine. They expect him to know how to keep them well; prevent disease. To do this, he has to do postgraduate work. No public health program can be carried on successfully without the wholehearted support of each physician in the community.

"A postgraduate day, although it may be primarily planned and designed for the general practitioner, should be attended by every specialist, because he must remember that whatever his specialty, it is still a human being he is treating and regardless of the ailment or part of the body affected, his specialty will also be involved.

"The practitioner of medicine will travel many miles so that his knowledge of the healing art will be improved. Because the postgraduate course is put on at home does not mean that you and I cannot learn something that will be of value to us."

A social security that claims to make everything safe for all through life would not be social security because it would ruin the chance of advance for society—James Truslow Adams.

It May Be Legal, But Still Be Against Patient's Welfare

The following excerpt from a report of the Ethics Committee of the Columbus Academy of Medicine not only is significant but a suggestion to other counties to give the once-over to what may be going on in their bailiwicks, as well:

"As might be expected, some technicians who have been suffered to operate independent laboratories now deal directly with the public; run Aschheim-Zondek and other pathognomonic tests, and give the results directly to the patient. The State Medical Board has asked the opinion of the attorney general if this constitutes the practice of medicine; if an affirmative reply is received, the threat from that particular direction should be easily squelched. But such action would not be necessary if the physician did not encourage competition by patronizing these lay laboratories."

We suggest that the last sentence of the quotation be re-read. Therein lies a lesson. Also it might be said that some of the limited practitioners of medicine would be less inclined to over-step their legal rights if they did not receive encouragement from some physicians. By the same token why do some physicians pat-

ronize laboratories which operate within the law but which thrive on cut-rate business and disregard professional ethics when it comes to promotional activities?

Sometimes we wonder if there isn't a lot of truth to the observation that the practices of a comparatively few unthinking or unscrupulous physicians have caused a good bit of the grief which keeps the entire profession in a constant state of turmoil.

No discovery of modern psychology is, in my opinion, so important as its scientific proof of the necessity of self-sacrifice to attain self-realization.—Henry C. Luik, Ph.D.

School Health Agency Has Big Responsibility; It Must Be Alert

The School Health Institute held recently at Ohio State University was not only an innovation but a success. We congratulate Dr. J. W. Wilce, director of the University's health service, and his associates who arranged the institute.

Such meetings are certain to develop discussions which will bring out points that will be beneficial to those in charge of supervising the health of student bodies. They provide opportunities for conferences between administrators and members of the medical profession on student health problems. Viewpoints can be exchanged and rough spots which occasionally cause friction can be ironed out. Teachers can be impressed with the fact that they have an important responsibility in cooperating with the medical profession in guarding the health of students. Students who attend can be warned agains the use of unqualified practitioners and be advised to acquire a competent family physician as adviser on medical and health matters. **Incidentally, agencies established to supervise the health and medical needs of student bodies should not lose sight of the fact that in the final analysis their field is limited; that part of their function is to see that students do get into the hands of qualified physicians; and that students be encouraged early in their school career to establish proper contacts with general practitioners who can care for their medical needs.**

Those who deal with the health and medical problems of students must be on their toes and cannot afford to overlook opportunities for "refresher" work such as that presented at the Ohio State University institute. While the student is in a receptive frame of mind and willing to be taught is the time to instill in him sound attitudes on medical and health questions. That is why the school health administrator's responsibility is so important and far-reaching.

On the other hand, the medical profession should not forget that guiding school health programs is the responsibility of the profession and should be so accepted by it. If physicians do not cooperate, guidance and control will fall into the hands of well-meaning laymen but who are not qualified to supervise an activity which is primarily medical service. School health programs are here to stay. This the profession must recognize. The real question is: Will the profession assume the responsibility; will it provide leadership of the kind which will make school health programs generally an asset to recipients as well as the medical profession?

Give our people the chance to work, and lessen the cost of government and our profession will care for the sick and our patients will take care of their doctors.—Illinois Medical Journal.

Helping the Beginner the Obligation of Older Practitioners

During the past month or so, the State Headquarters Office at Columbus has received from many younger physicians who have just completed their internships appeals for help in finding suitable locations for beginning active practice. Fortunately the Headquarters Office has been able to offer some valuable suggestions because it started two years ago to assemble lists of locations and openings and has accumulated some helpful data. Suggestions from members are solicited.

Members of the profession who have established themselves should not forget that they have an obligation to newcomers in the profession. The profession must stick together. It is comparatively easy for the young physician to go astray if he finds the economic trail too rough and rocky. Quality of medical care may easily deteriorate unless the coming generation of physicians are given a little boost as they start out.

The observations made by one writer on this question appeal to us and we pass them on for consideration of older physicians who are in a position to do something tangible to help their younger colleagues. To quote:

"The young men and women who are entering the profession have a hard road before them. When they receive their diplomas they are buoyed up by confident thoughts of all they have learned in medical school. If they are the stuff of which real doctors are made, it takes but a short time for them to discover how much they still have to learn.

"It has never been easy to get started in medical practice and earn a decent livelihood therein. Today, with a large percentage of the population on relief and medical institutions vying with one another to provide free service for the middle class, the financial difficulties of the tyro are intensified.

"It is up to the established physicians in every

community to extend a helping hand to those who are just starting out on the difficult road to professional success. Alone and unaided, the young physician is beset by a thousand errors and temptations. Frequently the friendship and advice of an older man can smooth away obstacles and allay doubts which might be the starting point for serious deviations from accepted ethical and scientific standards.

"It is advisable for newly licensed physicians to affiliate themselves with organized medicine at the very outset of their careers. In this way they establish contact both with their contemporaries and with established practitioners who have already solved some of the difficult problems confronting the novice.

"Physicians like to think of their profession as a universal fraternity. The word has little meaning unless those who have 'arrived' are willing to stretch out a brotherly hand to the young men and women who are struggling to 'get there.' The county medical societies, which are the core of organized medicine, should take a strong and sympathetic interest in the special problems of the newcomer in medicine."

The only problem not acute in Europe is parking space.—Ex-President Hoover.

It Is an Old, Old Riddle But It May Offer the Solution

With the statement that "from the looks of things it isn't the lack of medical care but rather too much of other necessities with the luxuries that prevent the family bankroll stretching far enough", our contemporary *The Milwaukee Medical Times* cites these figures:

In the United States 47 per cent of all families own their homes; 49.6 per cent own automobiles; 51.8 per cent have telephones; 15 per cent have electric refrigerators; 50.3 per cent have vacuum cleaners; 41.3 per cent have savings accounts; 34 per cent of the automobiles are owned by families with incomes of less than $20.00 per week; 55.5 per cent by families with incomes of less than $30.00 per week; 73.1 per cent by families with incomes of less than $40.00 per week; 88.9 per cent by families with incomes of less than $60.00 per week; and 2 per cent by families with incomes of $100 a week or more.

Also it is pointed out that it has been estimated that $180,000,000 is spent annually on slot machine play and about $400,000,000 on pin ball machines and similar devices.

No one begrudges families their automobiles, homes, telephones, vacuum cleaners, etc., or pocket money with which to spin the dials of slot machines (of course you can't beat 'em), but there does seem to be something wrong some place. It would seem as if a good many families who now claim that they are unable to meet ordinary medical costs could do so readily if they would simply inventory the family budget and lop off a few unnecessary (although desirable) items now being purchased on "easy credit" plans.

Your Local Radio Station Should Be Using A.M.A. Programs

It will be remembered that one of the activities being sponsored by the Sub-Committee on Public Health Education of the Ohio State Medical Association is to encourage high-class public health radio programs, undertaken if possible by county medical societies and academies of medicine. It was suggested by the sub-committee that local medical societies attempt to have local broadcasting stations carry the "Your Health" programs produced by the American Medical Association if local societies found it impossible to produce original programs for local broadcasts.

The following article from *The Journal of the American Medical Association* reveals that the A.M.A. program has been awarded a badge of merit and recommends that local medical societies try to interest managers of Ohio broadcasting stations in joining the hook-up which carries the A.M.A. programs. We concur in this suggestion and hope that local societies through their public health or public relations committee will cooperate by taking up the question soon with officials of their local stations, if any.

"The National Broadcasting Company has just issued a folder entitled NBC . . . Cum Laude, in which are listed awards to noteworthy radio programs broadcast over the National Broadcasting Company networks.

"The Institute for Education by Radio, at the ninth annual conference at Columbus, Ohio, heard transcriptions of more than 200 entries and made the following first awards to programs broadcast over the coast to coast networks of the National Broadcasting Company: Science in the News, produced by the University Broadcasting Council; The Story Behind the Headlines, by the American Historical Association; The NBC Home Symphony; Town Meeting of the Air, by Town Hall, Inc., and Your Health, by the American Medical Association. Honorable mention was awarded to the University of Chicago Round Table and The World Is Yours (the Story of Electricity), produced by the U. S. Office of Education.

"All these programs were produced over networks of the National Broadcasting Company and with the cooperation of the educational divisions of that company. The inclusion of the educational radio program of the American Medical Association in an honor group selected by educational and radio experts is gratifying. This program has been broadcast for three seasons in dramatized form, and active plans are under way for a new series for the fall, winter and spring of 1938-1939.

"The principal need of this program now is a broader audience and more local outlets. **County medical societies and auxiliaries have an opportunity to call the attention of this award of merit to the managers of local stations and to make efforts to interest such managers in the Your Health program as an exceptional sustaining educational feature for 1938-1939.** A sustaining program as distinguished from a com-

mercial program is one from which the networks and the local stations derive no revenue but which they contribute as a part of their function in broadcasting 'for the public interest, convenience and necessity.' The National Broadcasting Company cannot assure the broadcasting of network programs over stations not owned by the company, even though such stations have NBC network affiliations. The local outlets must be procured largely on the basis of local effort, through which local interest in the program can be developed. All principals of high schools and junior high schools should be given full information about the program. Informative folders prepared by the Bureau of Health Education will soon be available and will be sent gratis in quantities which can be put to good local use, on request."

No profession is more exposed to the temptation to forget honor, humanity and kindness than is the medical profession; and there is none in which the exploitation of human suffering is easier. Yet there is none in which the temptation is more triumphantly withstood.—John St. Loe Trachey.

Physician's Records Should Be Preserved; Problem Is: How?

What happens to the average physician's records after he has passed on? What practical plan can he work out to have them preserved for their scientific value or for the benefit of his patients who survive? Should a physician burden his family with the responsibility of disposing of them after he is gone?

True enough, this is not a pleasant subject. Nevertheless, facts must be faced, this one among them. We have no original suggestions to offer. However, we pass on for what they may be worth some thoughts expressed by a Boston physician in a letter to The Editor of *The New England Journal of Medicine* and published by that journal, reading as follows:

"The question as to what provision a physician or surgeon should make in regard to his medical records is one which I should like to have help in solving. I am writing this letter in hope that some of the readers of the Journal will have sufficiently concrete ideas so that a policy may be formed.

"The whole subject was recently brought forcibly to my attention when I saw a doctor's heirs offering for sale his files with the records in them. This was in a small town where several prospective purchasers would have been glad to obtain news about the neighbors. Fortunately, this catastrophe was averted, but it made me think how I should protect my own records.

"With the growth of scientific medicine and the careful investigations that many doctors give their patients, combined with the detailed histories, X-ray findings, laboratory reports and records of operations, I believe that a certain proportion of our records would be of real value to the doctor who treats these patients from where we leave off. Would it be feasible for a doctor to leave his records to a small group of physicians with a sufficient sum of money to pay for their storage with the understanding that that group would look through a record before giving it out to the physician to whom it might be of help so that personal letters and irrelevant statements could be first deleted? I have personally had patients referred to me, whose previous surgeon had died, where the pathological findings and procedures of a previous operation would have been very helpful. I believe that in straight medical cases the past histories and laboratory findings would be equally useful to a physician who was carrying on.

"At present, I can see no course open to us as physicians but the simple one of burdening our nonmedical families with the responsibility of our records and the request that they be destroyed at the end of a certain period of time."

The avidity with which the public accepts distorted half-truths dished out in an effort to sell this or that alleged remedy only proves the presence of an unsatiable appetite for education on matters pertaining to health.—The Nebraska State Medical Journal.

New Food, Drug and Cosmetic Act Step In Right Direction

Definite steps toward strengthening Federal regulation of foods, drugs and cosmetics were taken by the recent Congress through passage of an Act revising the Federal Food and Drug Act of 1906 and which has become law following the signature of the President.

General provisions of the law become effective next June. Certain provisions, however, became effective immediately. These include the prohibition against the introduction of new drugs before they have been tested; the prohibition against drugs which are dangerous to the consumer when used as prescribed on the label; and the prohibition against cosmetics which may be injurious to users.

Important respects in which the new law differs from the old law are:

The new law has jurisdiction over all cosmetics except toilet soaps. This means that the public will be protected against dangerous cosmetics such as eyelash dyes that have been known to cause blindness.

Brings therapeutic devices under control. In the past, many curative claims have been made for devices which have no value.

Regulates drugs intended for diagnosing illness or for remedying underweight or overweight, or otherwise affecting bodily structure or function. Included in this group are the so-called "slenderizers."

Requires adequate testing of new drugs for safety before they are put on the market, the

elixir of sulfanilamide which caused the death of nearly 100 persons last year, for example.

Provides for the promulgation of definitions and standards for foods. The old law contained no such authority except for canned foods. This means that the definitions and standards which under the old law were not binding, but merely advisory, will now have legal force and effect.

Increases penalties for violations. Under the old law the maximum fine for the first offense was $200. Under the new Act a first offense may be punished with a fine of $1,000 or one year imprisonment or both. For subsequent offenses under the old law the maximum fine was $300 or one year imprisonment or both. Under the new law this penalty is increased to a maximum of $10,000 or three years imprisonment or both. Even for first offenses where the court finds evidence of fraud or deliberate intent to violate the Act the maximum penalties are $10,000 fine or three years imprisonment or both.

Provides authority for the Federal courts to restrain violations by injunction.

Eliminates the necessity for proving fraudulent intent in the labels of patent medicines. Under the new law any such medicine proved to be worthless may be removed from the market.

Requires drugs intended for use by man to bear labels warning against habit formation if they contain any of a list of narcotic or hypnotic habit-forming substances, or any derivative of any such substance which possesses the same properties.

Requires the labels of non-official drugs (those not listed in the Pharmacopoeias and Formulary) to list the names of the active ingredients, and in addition to show the quantity or proportion of certain specified substances.

Some proponents of adding strength and teeth to the powers of the Federal Government to regulate food, drugs and cosmetics are disappointed at some provisions of the new law, believing that Congress failed, through necessity to compromise, to plug up some obvious weaknesses. Nevertheless, what steps have been taken are in the right direction generally speaking, and should add momentum to more adequate revision from time to time.

W.P.A. officials at Washington have ruled that unemployed workers receiving unemployment compensation benefits will not be barred from W.P.A. aid to bring their total income to a "security wage", whatever that is.

Efficiency of Services, Not Size of Premium, the Important Factor

Our old friend, "The Medical Crier," of *The Mahoning County Medical Society Bulletin* most always says a mouth-full when he speaks. In one of his recent dissertations he made such an exceptionally good point on the subject of professional liability insurance that we cannot refrain from quoting him. We believe his remarks are not aimed at any insurance company specifically but are made for the purpose of offering advice generally—let the chips fall where they will.

Said "The Crier":

"In Cleveland they are viewing with alarm the increase in cost of professional liability insurance. Numbers of the doctors are deserting the old established companies for newer ones who offer lower premium rates. It is the old Crier's opinion that it is best to stick with a fighting company even if the cost is more, for the following reasons: (1) They are specialists in professional insurance; (2) They will fight rather than pay 'nuisance values'; (3) They are interested in preventing suits; (4) They do not drop you if you have the misfortune to need their services."

The physician who judges his professional liability insurance on the basis of premium rates is penny wise and pound foolish. Judgment should be based on the kind of services received in exchange for premium payments and the reputation of the company not solely on the size of the premium assessed.

Incidentally, premium rates might not be so steep if some physicians would learn to hold their tongues and others would realize that the use of reasonable care and skill in all cases is the greatest safeguard for one who assumes grave risks every time he accepts a case.

COMING MEETINGS

Ohio State Medical Association, Toledo, May, 1939.

American Medical Association, St. Louis, 1939.

American Association for the Study of Goiter, Washington, D. C., Sept. 12-14.

American College of Surgeons, New York, Oct. 17-21.

American College of Physicians, New Orleans, March 27-31, 1939.

American Congress of Obstetrics and Gynecology, Cleveland, week of Sept. 11.

American Hospital Association, Dallas, Sept. 26-30.

American Public Health Association, Kansas City, Oct. 25-28.

Association of Military Surgeons of the United States and Canada, Rochester, Minn., Oct. 13-15.

Doctor's Equipment Stolen

The office of Dr. James C. Elder, Millersburg, was burglarized recently. Articles stolen included a national otoscope, a small metal otoscope and an ink stand. Dr. Elder has offered a reward for the return of his property. Local police officials should be notified of any attempt to sell articles meeting the above description.

WHY EVERY PHYSICIAN SHOULD COOPERATE IN A.M.A. STUDY OF MEDICAL CARE; HAVE YOU COMPLETED FORM NO. 1?

ON OR about June 1, supplies of blanks to be used in the important Study of Medical Care, sponsored by the American Medical Association and the Ohio State Medical Association, were distributed to the secretary of each county medical society and academy of medicine in Ohio.

Presumably, each secretary has in turn distributed the various blanks (or had a special committee of his society do so) to physicians, dentists and key agencies in his county for the purpose of obtaining the information requested.

Is your county medical society meeting the responsibility of conducting this survey in your county? If not, you and other members should insist that work be started and speeded up.

Have you received, filled out and returned Blank No. 1, a copy of which is to be distributed to each physician and dentist in Ohio? If not, why? This is an obligation which every physician must meet. Much depends on the cooperation of all physicians. Blank No. 1 is the real keystone of the entire survey.

For the benefit and information of those who would like to be more familiar with the reasons for and purposes of the A.M.A. survey, *The Journal* presents in part as follows a report presented to the House of Delegates of the A.M.A. at the recent San Francisco session by the Advisory Committee on Supply of Medical Care which is cooperating with the Board of Trustees of the A.M.A. in promoting the study throughout the country:

* * *

REASONS FOR AND PURPOSES OF A.M.A. STUDY ARE REVIEWED BY THE ADVISORY COMMITTEE

WIDELY publicized statements have been made by so-called leaders of medical science, social reformers and welfare politicians to the effect that the need for medical reform was urgent and that immediate radical changes were essential in order to give adequate medical care to countless hundreds who were now being neglected. Estimates of widespread inadequacy of medical care, rated as high as 50 per cent in the indigent groups, made some of us gasp. These claims have gone practically unchallenged except by the organized profession and are still being widely quoted and accepted by press and public. Information concerning the distribution of medical service which has been quietly accumulated in recent years at the headquarters of the American Medical Association was quite contrary to statements emanating from sociologic and welfare groups and from surveys inspired by governmental agencies. The desirability of more accurate data became very evident and, when voiced by the American Public Health Association, the trustees and officers of the American Medical Association lost no time in starting a nationwide survey of the actual supply of medical care. In contrast to previous health surveys made by laymen untrained and ignorant of the intricacies involved, this survey was to be made by the doctor himself.

COUNTY SOCIETY BASIC UNIT

After thorough preliminary study by the Bureau of Medical Economics and the officers of the Association, it was decided to use the county medical society as the basic unit of the survey. **It was not a case of "passing the buck" as was claimed, but it is the only way in which the medical conditions existing in different sections of the country could be determined.** It was also decided to include every phase of activity related to medical service, so as to make the survey as complete as possible. For this purpose forms were compiled which, when filled out, should give an exhaustive survey of the entire medical field. Authoritative data concerning the need and supply of medical care will at last be available and we shall now be able to discuss intelligently any inadequacy which may exist.

It is evident that this survey will furnish us not only a great variety of valuable data related to medical care but many by-products of importance as well. We should be able to determine, for example, the following data concerning any deficiency in supply of medical service: its geographic distribution; the type of community, and the social

status of the patient involved. We should also discover why these conditions exist, whether public officials or institutions are derelict, and in what respect. It would be most disappointing if from the great mass of data accumulated no suggestions developed to improve the present distribution of medical service. Not the least important will be the effect of the survey on public opinion and incidentally the sympathetic reaction on the part of laymen who have participated in the accumulation of data. Finally, and possibly of greatest importance, this survey should draw the component parts of our Association into closer relationship with activities centered in the Association headquarters.

Every effort has been made by the officers of your Association to publicize and arouse interest in the survey by means of articles in the Organization Section of *The Journal*, printed information sent to state organizations for distribution, and by individual efforts of the officers and members of the Board of Trustees.

ADAPTABLE METHODS SUGGESTED

An advisory committee was appointed by the Board of Trustees, composed of men from various parts of the country who have been interested in economic affairs. The members of the committee were unanimous in recognizing the importance of the survey and urged that it be carried out as thoroughly as possible. As might be expected, opinions as to the method of conducting the survey in the various parts of the country were quite different. It was felt that instructions in conducting the survey and in filling out the different forms should not be too didactic. It seemed desirable to let the various sections of the country devise their own methods of procedure.

What progress has been made so far? Although the survey has been carried on with enthusiasm in some states, we regret to say that the response in some parts of the country has been lukewarm and in several states very disappointing. There are scattered reports of open hostility and back-sniping on the part of individual members, insinuations that the survey will be worthless and will lay us open to criticism. The latter can happen only if we do not take the survey seriously and cooperate in every way possible.

VALUE OF PRELIMINARY CONFERENCES

It has been observed that those states were most successful which had first established a good working, preliminary organization. The exact form of the organization varied in the different states. In most cases the activities were centralized in the office of the secretary of the state association. In several states general supervision was left to the committee on medical economics, and detailed supervision in the various counties or districts of the state was subdivided among the members of the council or the board of trustees representing these districts. In most counties the details of the survey were in charge of a special committee appointed for this purpose. Contact was made with the county secretaries either by means of bulletins, notices in state medical journals, or personal visits from members of the economics committee, the council or the state secretary. The survey went over best in counties in which a preliminary informatory gathering had preceded distribution of the blanks. Meetings were held in the larger communities of the county, in which a representative group was given personal instruction by officials of the state organization or by the county secretary. In some states statewide and district meetings of county representatives were held.

The cost of conducting the survey varies widely in different localities. It has been found necessary to devote comparatively little money to it in most of the state associations, averaging only a few hundred dollars. The cost of the survey in the larger communities has been borne by the local county societies, with the assistance of the state medical societies in some instances, and has caused no excessive burden. The total expenditure entailed should not be a serious problem and promises to be insignificant in comparison with the value received.

FORM NO. 1 MOST IMPORTANT

With regard to the various forms, as might be expected, form 1, which deals directly with the physician himself, is criticized most. Confusion arose in the minds of some as to how to answer questions 1, 2 and 3 of this form. Since many physicians did not keep a close record of indigent patients, it was difficult to give an exact answer to these questions. **However, it was held by Dr. Leland and others that an approximate estimate of the number of patients treated would suffice. In some places physicians are keeping records for a month or more to get dependable estimates.**

It is generally recognized that no large survey can be 100 per cent accurate. Even life insurance companies are unable to make an exact survey. The most we can expect to get will be a pattern or sampling of the medical situation in each county and state. Although it is important that the sampling should be as accurate as possible, it is of equal importance that every physician should do the best he can in filling out the blanks.

In order to increase the accuracy of data from several questions in form 1, it was thought advisable to make a separate spot survey over short periods of time. Accordingly, the Bureau of Economics is sending out record forms to cover these different periods, in July, October and Jan-

uary. These blanks, form 1 F, will permit the keeping of an accurate record of patients during those periods.

The importance of answering questions 7 and 9 in form 1 cannot be overemphasized. In fact, the actual value of form 1 would be comparatively little unless these questions were fully considered. We are particularly interested in knowing what the physician's reaction is toward the problems of medical care and what remedies he can suggest for their improvement under the present circumstances.

SURVEY IS REAL CHALLENGE

In large and highly industrialized communities, considerable difficulty arose in filling out form 8. The Bureau of Medical Economics has repeatedly advised the use of additional questions or forms when necessary to acquire a complete understanding of the problem of medical demand and supply. We understand that the blanks sent out to the various institutions and social agencies have been filled out much more promptly and completely than those sent to the physicians themselves. It would be most unfortunate for the success of the survey if this discrepancy should continue.

It cannot be made too emphatic that this is primarily a survey of the practitioners of this country. We are interested in finding out the direct results of their observations and their conclusions as to the supply of medical service. We are not interested so much in the theoretic reforms of many of the so-called leaders of medicine, which in most cases are products of the noble thought and the library table. It is not of great importance to find out what those who are engaged in teaching or cloistered specialists and institutional doctors think about medical care, and we already know what governmental officials and social workers think. The facts of the situation must come from those who are in direct contact with the actual practice of medicine. We must find out from them to what extent reform in medical care is needed and get their opinions as to how it can best be accomplished.

If there ever can be a mandate from the American Medical Association to its members, this survey should be so considered. Now that we are definitely committed to the survey, it is up to us to make good; if we do not, the situation will be most disastrous. It is no exaggeration to state that this survey may have a profound influence on the future course of American medicine.

Dr. Edward A. Meyerding, St. Paul, has retired as secretary of the Minnesota State Medical Association after serving for 14 years, to continue on a full-time basis as executive secretary of the Minnesota Public Health Association.

School Health Institute Held at Ohio State University Attracts Large Crowd and Much Interest

Six hundred and forty physicians, teachers, dentists, school nurses, social service workers and summer school students attended the School Health Institute held at Ohio State University, Columbus, June 29 to July 2. One of the first of its kind ever held in the country, the program was arranged by Dr. John W. Wilce, director of the University Health Service, with the cooperation of the University Health Council, the College of Medicine, the College of Education, the Summer Quarter Council, the Department of Physical Education and the State Departments of Health and Education. Through the Ohio State Medical Association, a number of interesting health exhibits were provided by the American Medical Association.

The meeting opened with a joint convocation of of the Health Institute and the Ohio State University Summer School, Wednesday afternoon, June 29. Dr. Morris Fishbein, Editor of *The Journal of the American Medical Association*, spoke to an over-flow crowd on "Medical Nostrums and Quackery".

At the Thursday afternoon session, Dr. J. H. J. Upham, dean of the O. S. U. College of Medicine, spoke on "Medicine Views School Health", and Dr. Wilce discussed "Ohio School Health from the Viewpoint of the Ohio State University Health Service—A Study of Health History, Attitudes and Findings Among 3,000 College Freshmen".

Speakers on Friday morning, which was devoted to the subject, "The Teacher as a Case Finder in a School Health Program", included: Dr. Elmer G. Horton, Dr. Charles J. Shepard, Dr. George T. Harding and Dr. Wilce.

Dr. D. W. Gudakunst, Commissioner of Health, State of Michigan, and former Director of School Health Service, Detroit Department of Health, spoke on "Newer Trends in School Health Service", at the Friday luncheon session. Dr. Charles A. Doan, chairman of the Department of Medicine, Ohio State University College of Medicine, presided. One of the discussants was Dr. Allen Ireland, Supervisor of School Health and Physical Education of New Jersey.

Ohio physicians who participated in roundtable discussions Friday afternoon, included: Dr. Ruth St. John, Dr. Walter Duffee and Dr. Shirley Armstrong.

Dr. Ireland spoke on "Problems of Correlating School and Community Health Programs", Friday evening. Dr. Upham presided at this session.

Physicians who participated in the Saturday morning discussion, which was devoted to "Special Problems in School Health", were: Dr. N. Michael, Dr. A. D. Frost, Dr. Russel G. Means and Dr. Harlan Wilson, Columbus.

NATIONAL HEALTH CONFERENCE: ITS ORIGIN AND OBJECTIVES EXPLAINED BY MISS ROCHE IN COMMUNICATION TO A.M.A.

AS this issue of *The Journal* went to press, there was being held in Washington, D. C., a National Health Conference about which much has been written and concerning which plenty more will appear in the public press and elsewhere.

What is this National Health Conference? Who sponsored it? Why was it called? Who attended it? What are its objectives? Is it of interest to the medical profession?

No doubt many physicians have asked themselves these questions and have been asked them by their friends among the laity. All physicians should know about the National Health Conference because of its importance and significance.

Therefore, *The Journal* believes that the following should be of interest to its readers. It is a verbatim report of an address prepared by Miss Josephine Roche for presentation to the House of Delegates of the American Medical Association at the recent San Francisco session of the A.M.A., but which was read by a representative of the U. S. Public Health Service in her absence. Miss Roche is chairman of the Interdepartmental Committee to Coordinate Health and Welfare Activities of the Federal Government and assistant secretary of the treasury in charge of public health, although now on leave of absence from her official duties. Her committee is responsible for the National Health Conference and she reviews the purposes of the conference:

WORK OF THE INTERDEPARTMENTAL COMMITTEE TO COORDINATE HEALTH AND WELFARE ACTIVITIES OF THE FEDERAL GOVERNMENT

By Josephine Roche, Chairman

THE Interdepartmental Committee was created in August, 1935, following the passage of the Social Security Act, in order that the full benefits of the varied Federal program under the Act's provisions might reach with minimum delay and maximum effectiveness the individual men, women and children for whose aid and service the program was brought into existence. Obviously, duplication of work and effort, conflict in policy or procedure among Federal agencies had to be prevented and common understanding and action developed if the values of the program were to be translated quickly into realities.

As members of this Committee the President designated four assistant secretaries of government departments, the Treasury, Interior, Agriculture and Labor, and the chairman of the Social Security Board.

The committee's first task was the setting up of technical committees to work out immediately cooperative agreements between Federal agencies functioning together in the states. Two may be used as illustrations: the agreement between the United States Public Health Service and the Children's Bureau on public health nursing, and the agreement between the United States Public Health Service and the Division of Labor Standards, on industrial hygiene.

The technical committee of the Children's Bureau and the United States Public Health Service representatives worked out an agreement defining the objectives, setting standards of service and committing both the Children's Bureau and the Public Health Service to a joint approach to the various state health departments so that efforts of the two agencies should not be retarded by any duplication of effort or multiplicity of supervising units, with the inevitable misunderstandings and confusion in the field which would result.

The industrial hygiene agreement was the result of a desire on the part of the Department of Labor and the Public Health Service to promote in the states the establishment of industrial hygiene units in the state health departments which would cooperate with the state labor agencies in the pursuance of the common objective, protection of the working population from industrial health hazards.

OTHER TECHNICAL COMMITTEES

Other technical commitees working out similar interdepartmental agreements for administrative

coordination are those on crippled children and the needy blind.

While there has not been, of course, 100 per cent success in eliminating duplication of effort and competition between interested agencies in the states, we are convinced that the three years' experience has evolved a useful and unique mechanism for coordinated procedure. It is useful in that technical groups may meet together and, through conference and interchange of experience, approach mutual understanding and agreement based upon a solid foundation of fact. It is unique in its simple combination of facilities to provide direct administrative action when technical groups have determined the procedure through which harmony of action may be achieved.

Working under the instruction of the President's order "to study and make recommendations concerning specific aspects of the health and welfare activities of the government" are the technical committees on recreation, nutrition, crime prevention and parole, and medical care.

In the work of the last named committee you have, of course, a special interest, and our Interdepartmental Committee is deeply grateful and encouraged to know that a number of you, including some of the officers of the American Medical Association, are to be with us at our National Health Conference July 18, 19 and 20 when the full report of this technical committee will be submitted and discussed.

NATIONAL HEALTH SURVEY

At the time the technical committee on medical care was formed the national health survey of the Public Health Service was nearing completion. You are familiar with the results of that survey covering as it did some 800,000 families including 2,800,000 persons and supplemented by reports from physicians, health officers and institutions providing medical services. This survey made it possible to measure health needs quantitatively and to determine the degree of correlation among all the factors involved. It provided an index not only to the prevalence of disabling illness for the population as a whole but according to age, sex, occupation, family income, living standard and size of community. It made it possible to weigh these factors in relation to mortality figures as well as to medical and nursing care received and to the availability of hospital facilities.

The overwhelming central fact established by the national health survey is this: That with poverty goes not only a higher rate of sickness but a deficiency of medical care. These correlations were proven not only for the relief group but for struggling families above the level of relief. Many may have considered these facts too obvious to require proof and certainly they had been supported by innumerable smaller studies. But never before had such a mountain of evidence been assembled to sustain the conclusion that among the poor there is an excess of sickness and death which requires preventive services and medical care proportionately greater than are required in the higher income groups. And never before had it been so convincingly shown that in many areas and localities those economic groups which are most in need of preventive services and medical care are receiving far less of both than are families with larger individual financial resources.

"NEED FOR HEALTH PROGRAM"

The national health survey irresistibly drew the attention of the Interdepartmental Committee to the national problems of health and medical care. The technical committee on medical care was directed to study the results of the national health survey and to correlate with them all other available data on the subject. After more than a year of work, the technical committee produced a report on "The Need for a National Health Program" which was transmitted to the President last February. Already a part of this report, in which the health needs of the country are stated comprehensively yet concisely, has been made public; with facts and conditions such as it sets forth you have long been familiar through the years of generously contributing your skill and services to the destitute and broken men, women and children who have turned to you for aid in illness and suffering. It is to be hoped we may have graphically given to us by your own survey the full extent of the free services of the medical profession. It would be a good thing for every citizen to realize more clearly the immensity of the philanthropic burden which the members of the medical profession voluntarily assume.

We have the information as to health and medical needs in broad national terms. Your survey should be of great value in amplifying existing data regarding many specific localities and in presenting needs as they are seen in the field by practicing physicians. In this, as in all other fields, it is necessary always to keep in mind the difference between active demand and actual need. Our present picture of the total need may be amplified or modified in detail as further special studies are made. But the report of the technical committee on medical care, based upon all available data, including direct contacts with large numbers of individual citizens as well as with professional groups and agencies, establishes conclusively the existence of grave and far reaching needs.

STATISTICS CITED

Together with you, those of us who have been battling on the economic front against unemploy-

ment, starvation wages, indecent housing and utterly inadequate food, find nothing new but only shocking confirmation of the extent to which human and economic waste has been permitted to go on, when we read from the technical committee's report on "The Need for a National Health Program" such facts as the following: On an average day of the year there are four million or more persons disabled by illness. Every year seventy million sick persons lose over one billion days from work on customary activities. In 1936, nearly a quarter of a million women did not have the advantage of a physician's care at delivery; 15,000 of these were delivered by neighbors or relatives; 223,000 were delivered by midwives, most of whom are untrained and ignorant.

In 1937, of forty-nine state health officers responding to a questionnaire only two reported the facilities for maternal care in their states as adequate. In large areas and groups of the population the death rates between the second and twelfth month of infancy are as high as they were for the whole country twenty years ago. Community measures for the control of communicable disease, so necessary in checking the acute infectious diseases of childhood, are inadequate in the greater proportion of rural counties throughout the country.

Each year 40,000 young adults between the ages of 15 and 45 die from the ravages of tuberculosis. The deaths among these young adults represent about three-fifths of all deaths from this cause.

DISABLING ILLNESS DATA

Preliminary results from the national health survey indicate that in that portion of the population who are receiving relief disabling illness occurred in 1935 at an annual rate 47 per cent higher for acute illness and 87 per cent higher for chronic illness than the corresponding rates for families with incomes of $3,000 and over. The annual days of disability per capita in the group on relief were found to be three times as great as among families in the upper income group; the population not receiving relief with an income under $1,000 showed a rate of disability over twice that of the highest income group. One in every twenty heads of families in the population on relief was unable to work because of chronic disability as contrasted with only one in 250 heads of families with incomes of $3,000 and over. Children of families on relief experienced 30 per cent greater loss of time from school and usual activities because of illness than did children in families in moderate and comfortable circumstances. Only 70 per cent of the cases of disabling illness among persons on relief received medical attendance exclusive of hospital care compared with a figure of 83 per cent for those with a family income of $3,000 and over. The average medical services per case of disabling illness were about 50 per cent higher in the highest income group than among persons on relief. Beside nursing care in the home was given to less than 1 per cent in the disabling illnesses among persons on relief; the proportion so attended in the group with family income of $3,000 and over was 10 per cent.

These are only a few examples plucked more or less at random from the data which we have about the low income groups of our people. We must keep constantly in mind the fact that approximately fifty million of our population are in families with an annual income of less than $1,000 a year.

When facts of denial and destruction of human values, such as these I have mentioned, are discussed in terms of the size of the population involved, the tens of millions of men, women and children who are their victims, the problem of providing adequate health and medical services obviously demands concerted public action for its satisfactory solution.

PURPOSES OF CONFERENCE

In calling the National Health Conference the Interdepartmental Committee is carrying out the suggestion of the President that it invite representatives of the interested public and of the medical and other professions to examine the health problems in all their major aspects and to discuss ways and means of dealing with these problems.

The National Health Conference is planned as a working conference. To provide the best opportunity for frank discussion it is necessary to limit the number of participants, but the Interdepartmental Committee hopes that they will be truly representative of both the professional groups who have the technical knowledge, and of the general public which is vitally interested in the distribution and application of this knowledge.

It is hoped that the conference will contribute to two ends: first, a better understanding of national needs in the field of health and medical care; second, the formulation of policies which will enable the medical and other professions, private organizations, Federal, state and local agencies and individual citizens to cooperate in efforts to meet these needs.

FIVE RECOMMENDATIONS

The technical committee on medical care will submit to this conference not only its analysis of needs but certain tentative recommendations as to means of meeting them. These recommendations have been submitted to the President and it is at his suggestion that they will be submitted to the consideration of the National Health Conference. The report deals with several broad problems. First is the need for more comprehensive public health services to combat specific dis-

eases or groups of diseases such as tuberculosis, the venereal diseases, pneumonia, malaria, cancer and other chronic diseases of middle and old age, mental disease and deficiency, and industrial hazards.

Second is the need for expansion of maternal and child health services. The technical committee estimates that half the infant deaths and half the maternal deaths could be prevented by the application of the knowledge and skill which your profession now has.

Third is the shortage or unequal geographical distribution of hospitals, clinics, doctors, dentists, nurses and other agencies and trained experts in the field of health and medical care.

Fourth is the means of providing more adequate medical care for recipients of public assistance and other persons of very low income.

The final problem is methods of financing the sickness costs of self-supporting persons of limited means.

NO FORMAL ACTION

We do not intend to ask the National Health Conference to take formal action on any part of this report. We hope that none of the groups or individuals participating in the conference will attempt to make premature judgments or urge others to do so. Our purpose is to obtain the frankest discussion of ways and means of dealing with these immense and complex problems. We hope that the participants in the conference and, subsequently, other groups and individuals throughout the country will give us the full benefit of their knowledge, experiences and ideas.

No one formula or program can possibly be found adequate to meet the varied needs, but a composite of many efforts and plans, some already tested, some in experimental stages, some not yet under way, can and must be found. We believe that by providing an opportunity for an interchange of views between representatives of the medical and other professions, of various agencies and of the general public, the National Health Conference will dissipate misunderstandings and work toward a meeting of minds on the beginning of a coordinated national health program.

That there will be concerted public action eventually for such a program no one measuring the human needs and denials can doubt. In this great democracy with its unsurpassed resources and potentialities for human progress, one third of our people are not going to remain indefinitely ill fed, ill housed and ill cared for in sickness. Already they are on the march, and the only question which remains is whether highly specialized groups, experienced and trained in ways and means of meeting human needs, are going courageously and quickly to offer all they can give in constructive and progressive leadership and help in the meeting of the vast human problems of today.

You have your instruments of precision for diagnosis and treatment; your technics for prevention and cure are among the wonders of the modern world. How can we help to bring them to all our people who need them? That is the question which we submit to you today, the question we shall ask at our conference, must go on asking until we find the answer.

* * *

Action of House of Delegates on Miss Roche's Address

Editor's Note: Miss Roche's address was referred to the Reference Committee on Executive Session by the House of Delegates of the A.M.A. That committee returned the following report and recommendations which were unanimously adopted by the House of Delegates:

"Your committee believes that it expresses the sentiment of the House of Delegates in saying that it is glad to have received a communication from the chairman of the Interdepartmental Committee, Miss Josephine Roche. It is particularly welcome since it is the first official communication that the American Medical Association has received from this important committee.

"Your committee notes with interest that the studies have resulted in the coordination of health activities involved in the Public Health Service, in the Department of Labor and in the Children's Bureau. It trusts that future results will bear out the promise of increased efficiency.

"Possibly the most interesting data quoted are those which would indicate a much higher rate of sickness in the sub-economic groups. This raises the question whether the economic factor involved is not of greater importance than is the lack of medical care in the cause of illness.

"The address contains many interesting statements regarding medical care, some of which are at variance with data accumulated in the files of the Bureau of Medical Economics.

"Although your committee agrees in principle with many of the objectives which the Interdepartmental Committee has in view, nevertheless there may be some danger involved in their execution. Your committee has in mind, for example, the devotion of huge sums of money to the care of certain specified diseases. Experience has already shown that such action may produce a lack of balance in the entire program for medical care which can retard rather than expedite progress.

"Your committee emphatically agrees with the statement in the address which reads as follows: 'No one formula or program can possibly be found adequate to meet the varied needs of medical care.'

"Your committee notes with satisfaction that

a group of physicians has been invited to take part in the discussions of the forthcoming National Health Conference and that it includes officers and leaders of the American Medical Association. This will make available a vast amount of information concerning the subjects involved which has been accumulated by the American Medical Association over a period of years, including results of our national survey of medical service. Your committee is confident that the official representatives will be guided by the principles and opinions which have been repeatedly expressed by the House of Delegates."

Commission is Created in New York to Recommend State Health Program

A commission has been created by the Legislature of the State of New York to investigate means of improving the health of the people of the state and to recommend a long-range state health program in accordance with the following policies cited in the preamble to the bill:

"The Legislature hereby finds and declares as the policy of the State that the health of the inhabitants of the State is a matter of State concern; that adequate medical care is an essential element of public health; that the present efforts of the medical profession in providing medical care should be supplemented by the State and local governments; that the problem of economic need and the problem of providing adequate medical care are not identical and may require different approaches for their ultimate solution; and that a long-range state health program directed toward all groups of the population should be formulated and carried out."

The Westchester (N. Y.) Medical Bulletin points out that the Act mentions specifically eight subjects which the commission is directed to investigate, which are almost precisely identical with the proposals of the "Committee of Physicians".

The sum of $15,000 is appropriated for the commission. The personnel is to comprise three senators, three assemblymen and three persons to be appointed by the Governor, two of whom shall be licensed physicians. The measure was introduced by Assemblyman Robert F. Wagner, Jr., son of U. S. Senator Wagner.

Ohio Gets $110,000 for V. D. Program

Under the provisions of the La Follette-Bullwinkle Bill, enacted by Congress, $2,400,000 has been allocated to the various states and territories for the expansion of the work of health departments in the field of venereal disease control. Ohio received $110,784, the fifth largest amount. The allocations were made on the basis of population, financial need and the scope of the venereal disease problem in each state.

Catholic Hospital Association Condemns Socialized Medicine; Stands By A.M.A.

According to the *Buffalo Academy of Medicine Bulletin* resolutions adopted at the closing session of the 23rd annual convention of the Catholic Hospital Association of the United States and Canada, held in the 174th Armory, Buffalo, June 13 to 17, disapproved the socialization of medicine by declaring "that whatever shifts in viewpoint concerning the fundamentally ethical considerations of medical care be introduced, those basic principles concerning the personal relationship of the patient and physician, the implication of sound, ethical obligations, the fixing of personal responsibility for medical care, the confidential character of the relationship between patient and physician and similar fundamental considerations must by all means be safeguarded lest we enter upon untried social procedures in supplying medical attention to the detriment not only of public health, but also to the detriment of the individual patient's health. The Association, therefore, reiterates its confidence in the persisting validity of medical practice as enunciated by the American Medical Association."

In regard to the extension of the Federal hospitalization program, the Association recorded its fears "that the persistent repression of the importance of the private hospital and the aggrandizement of the government institution might result in undesirable, even harmful standardization, in extravagance and waste, in inefficiency, and probably will undermine the civic spirit in communities precisely at a time when it seems most necessary to strengthen that spirit and the community's increasing consciousness of the importance of adequate health care."

Three hundred and twenty-five hospitals were represented at the convention by upwards of 800 delegates.

National Tuberculosis Program Endorsed

Surgeon General Thomas Parran, Jr., of the United States Public Health Service, has endorsed an intensive national program financed by the Federal Government, for the complete eradication of tuberculosis, adopted by the National Tuberculosis Association at its annual meeting in Los Angeles, June 20. Estimated cost of the program is $200,000,000, including $140,000,000 in 1939 for the construction of hospitals to house 40,000 patients; $30,000,000 for maintenance of 40,000 hospital beds and an amount of $5,544,000 for X-ray examinations of an estimated number of 792,000 persons in the United States who have had family contact with known cases of tuberculosis.

What Happened at the A. M. A. Meeting?

Boil-Downs of Official Action of House of Delegates on Numerous Important, Current Questions of Interest to the Medical Profession Generally

"WHAT happened at the A.M.A. meeting?" asks the organization-minded physician (every physician should be in these days of uncertainty) who was unable to attend the 1938 session of the national organization at San Francisco in June.

Believing that all physicians should be acquainted with the official actions and policies of the House of Delegates, governing body of the A.M.A. and that few physicians will avail themselves of the opportunity to wade through the official minutes of the transactions published in the July 2 issue of *The Journal of the American Medical Association*, boil-downs of some of the more important actions taken and policies adopted at the San Francisco meeting are published as follows, supplementing the preliminary and incomplete article regarding the session published in the July issue of *The Ohio State Medical Journal*, page 816:

* * *

Ohio was represented in the House of Delegates by its full quota of seven delegates: Dr. Ben R. McClellan, Xenia; Dr. C. W. Waggoner, Toledo; Dr. C. E. Kiely, Cincinnati; Dr. Carl R. Steinke, Akron; Dr. George F. Zinninger, Canton; Dr. V. N. Marsh, Painesville, and Dr. John B. Alcorn, Columbus. Delegate from the Section on Dermatology and Syphilology was Dr. Clyde L. Cummer, Cleveland. Dr. McClellan served as a member of the Reference Committee on Reports of Officers and Dr. Cummer as a member of the Reference Committee on Reports of Board of Trustees and Secretary. Dr. J. J. Marek, Cleveland, won the American Medical Golfers' Association championship. Names of Ohio physicians who registered at the San Francisco meeting are appended to this article.

* * *

Action of the House of Delegates on resolutions and reports, which action established some new policies and re-emphasized some existing policies, was as follows:

Endorsed the principle that graduates of foreign medical schools should be required to obtain full citizenship in the United States before being admitted to practice in this country.

ASK STUDY OF HOSPITAL RELATIONS

Approved a joint study by the Council on Medical Education and Hospitals and the Bureau of Medical Economics of existing relationships between hospitals and physicians practicing therein, especially in departments of anesthesia, pathology, radiology and physical therapy, for the purpose of establishing ethical standards and standardizing the relationship of these services to the hospital to prevent the exploitation of either the public or the profession.

Reaffirmed the 10 principles adopted in 1937 as the policy of the A.M.A. on group hospitalization insurance and amplified Principle No. 4 to read as follows (new matter in blackface): "The subscriber's contract should exclude all medical services—contract provision should be limited exclusively to hospital facilities. If hospital service is limited to include only hospital room accommodations, such as bed, board, operating room, medicines, surgical dressings and general nursing care, the distinction between hospital service and medical service will be clear. **If for any reason it is found desirable or necessary to include special medical services such as anesthesia, radiology, pathology or medical services provided by out-patient departments, these services may be included only on the condition that specified cash payments be made by the hospitalization organization directly to the subscribers for the cost of the services.**"

OPPOSED BAN ON ANIMAL EXPERIMENTATION

Voted to oppose all legislation which would restrict controlled animal experimentation for scientific purposes.

Requested the Council on Foods to re-establish suitable standards for the acceptance of butter and dairy products and the advertising associated therewith; and to carefully scrutinize advertising of butter substitutes to the end that "no improper or extravagant claims of nutritional value be associated with the use of the seal of acceptance of the Council."

Endorsed the film "The Birth of a Baby" for its educational value but recommended that its showing be restricted to adults and in counties where the medical society approves the picture.

Rejected a recommendation for creation of a "Council on Medical Care" because the Board of Trustees is considering the formation of a special committee under that or a similar title.

Approved in principle the establishment of the Rockefeller Cancer Control Fund, recommending that a majority of the members of the advisory council be members of the A.M.A.

Condemned the sale of sulfanilamide and its allied products over the counter and its use by the public, except when prescribed by a physician and taken under his observation.

Recommended that the Bureau of Medical

Economics conduct a study of fee schedules for medical services so that the A.M.A. can declare itself on controversial points, such as: (1) the advisability of or necessity for fee schedules in the public interest; (2) their ethical or unethical qualities; (3) necessity for certain fixed principles to guide constituent units when and if it is deemed, in the public interest, necessary to adopt such a device; and (4) whether such schedules should or should not provide for elasticity so as to permit an adaptation to wage levels, specialized medical services, variations based on differential costs, and other related considerations.

ASSOCIATION WITH CULTISTS RAPPED

Condemned as unethical the association of physicians professionally with various cultists and limited practitioners, such as teaching in cult schools, addressing societies of cultists, occupying offices with such practitioners, and granting consultations to cultists, except in cases of emergency, by adopting a report of the Judicial Council, reading as follows:

"Many inquiries concerning the relations of the various cults to the regular profession have been received. The inquiries pertain particularly to the osteopath and the optometrist. Some of our members are giving lectures in osteopathic and optometric schools and addresses before their societies. Some members are associated by a common waiting room in offices with them. Some members are by mutual agreement professional associates principally in the field of surgery. There are some instances of partnership in practice. All of these voluntarily associated activities are unethical. Such relations certainly do not 'uphold the dignity and honor of (our) vocation' or 'exalt its standards'. In case of emergency no doctor should refuse a sufferer knowledge or skill which he possesses to the sufferer's harm but this is quite a different matter from that of a consultant or practitioner who by consulting or practicing with him assists a cultist to establish himself as competent and on the same basis of medical knowledge as a doctor of medicine. By the very nature of the education and training of each, a consultation with a cultist is a futile gesture if the cultist is assumed to have the same high grade of knowledge, training and experience as is possessed by the doctor of medicine. Such consultation lowers the honor and dignity of the profession in the same degree to which it elevates the honor and dignity of the irregular in training and practice. Practicing as a partner or otherwise has the same effect and objection. Teaching in cultist schools and addressing cultist societies is even more reprehensible, for such activities give public approval by the medical profession to a system of healing known to the profession to be substandard, incorrect and harmful to the people because of its deficiencies. There hardly can be a voluntary relationship between a doctor of medicine and a cultist which is ethical in character."

RULE FOR RENTAL OF RADIUM

Adopted the following statement with respect to the rental and use of radium:

"A widespread practice of renting radium for the treatment of patients by physicians not owning or being experienced in the use of radium has caused considerable discussion during the past year. Ordinarily instructions in the technic of the use of the radium are sent by the person furnishing it. Sometimes the radium is furnished by a commercial concern, sometimes by a physician owning it. The advisability of the use of such a powerful agency by those not trained in its use and the ethics involved of prescribing and directing its use by a person who has not examined or seen the person on whom it is to be used has come before the Council. As a result of a rather extensive correspondence both from those favoring its use as described and those opposed, the Judicial Council is of the opinion that the prescribing and directing of its use in the case of a patient whom the prescriber has not examined or seen is an unethical medical procedure. The Council recognizes that advice and help in difficult cases is often furnished by those in a position to be of possible or probable assistance but it believes that the great dangers accompanying the use of radium removes that particular remedy from the field of advice without personal contact with the patient."

Approved changing the name of the Bureau of Health and Public Instruction to the Bureau of Health Education.

Rejected a resolution requesting the Board of Trustees to instruct the Editor of *The Journal of the A.M.A.* to confine his writings to the official publications of the A.M.A. and adopted a recommendation expressing confidence in and respect for the Editor, Dr. Fishbein.

Approved the Indiana plan of health education and preventive medicine, presented as "an antidote for state medicine" and as a "workable plan to protect the health of the people of the United States".

Took no action on a resolution condemning as unethical the teaching by physicians in schools of chiropody, pending an investigation by the Judicial Council.

STANDARDS FOR VISUAL TESTS

Adopted standards for visual tests if such tests are used in the granting of drivers' licenses, as follows:

A. For an Unlimited License:
   1. Visual acuity with or without glasses of 20/40 Sn. in one eye and 20/100 Sn. in the other.
   2. A form field of not less than 45 degrees in all meridians from the point of fixation.
   3. The presence of binocular single vision.
   4. Ability to distinguish red, green and yellow.
   5. Night blindness not to be present.
   6. Glasses when required be worn while driving and those employed in public transportation be provided with an extra pair.

B. Visual Standards for Limited License:
   1. Visual acuity of not less than 20/65 Sn. in the better eye.
   2. Field vision of not less than 60 degrees

horizontally and 50 degrees vertically from point of fixation in one eye.
3. Diplopia not to be present.
4. Glasses to be worn when prescribed.
5. Coordination of eye, mind and muscle to be fully adequate to meet the practical visual road tests.
6. A limited license not to be issued to those employed in public transportation.

C. Renewals, Retesting and Re-examinations:
1. Renewals of license to be issued at least every third year. The applicant shall with each renewal make a declaration that he knows of no visual defect which has developed during the past year.
2. Retesting of acuity to be made at least every six years.
3. If any visual defects have developed, an examination by an ophthalmologist and the report thereof, to be required before reissuing the license.
4. License to state thereon the specific limitation for driving.

Reiterated a request for the establishment of a Federal Department of Health with a doctor of medicine as its head.

Recommended the appointment of physicians to state workmen's compensation boards or commissions.

Instructed the Board of Trustees to initiate a study for determination of definite, legally acceptable, scientific, clinical and laboratory tests for alcoholic intoxication.

PUBLIC RELATIONS DISCUSSED

Refused to establish a committee on public relations or to instruct the Board of Trustees to employ professional public relations counsel as such activities are now being carried on efficiently through existing councils, bureaus and committees of the A.M.A., but at the same time recommended to the Board of Trustees "that careful consideration should be given to the operation of our agencies of public information so that on the one hand, the necessary *fortiter in re* may be preserved and, on the other, that certain deficiencies of *suaviter in modo* may be corrected."

Condemned the bombing by troops of any country of hospitals, Red Cross units and the helpless public.

* * *

Ohio physicians registered at the San Francisco session were:

Cincinnati—Eslie Asbury, Ruth G. Bernheim, M. A. Blankenhorn, Ralph G. Carothers, James T. Clear, Daniel J. Davies, Charles R. Deeds, Samuel Goldblatt, Charles D. Heisel, Mortimer Herzberg, C. E. Kiely, Joseph A. Lindner, Harry T. McFarland, A. Graeme Mitchell, Helena T. Ratterman, Charles M. Siegel, Tom D. Spies, K. L. Stoll, E. B. Tauber, Esther Bogen Tietz, Derrick T. Vail, W. H. Ventress, B. C. Willis.

Cleveland—Robert E. Barney, Samuel L. Bernstein, H. Van Y. Caldwell, C. J. Cassidy, Milton B. Cohen, Harold N. Cole, Clyde L. Cummer, R. S. Dinsmore, James R. Driver, J. Edgar Fisher, Geo. Edw. Follansbee, Wm. James Gardner, Curtis F. Garvin, Marion N. Gibbons, C. Lee Graber, Russell L. Haden, Karla P. Hahn, John E. Hannibal, Richard N. Inch, Thomas E. Jones, B. S. Kline, James J. Marek, E. Perry McCullagh, Bernard H. Nichols, John E. Novak, Lawrence A. Pomeroy, Cora J. Randall, John E. Rauschkolb, Ruth A. Robishaw, Albert D. Ruedemann, Ralph A. Scherz, Roy W. Scott, A. F. Spurney, Robert M. Stecher, W. G. Stern, Clement E. Steyer, Reuben K. Straus, Harold B. Thomas, Jas. G. Warner, Samuel J. Webster, Beulah Wells, Rolland J. Whitacre, Zolton T. Wirtschafter, Edward E. Woldman.

Columbus—John B. Alcorn, E. H. Baxter, Albert D. Frost, Huston F. Fulton, H. D. Giles, M. D. Miller, Charles S. Nelson, Joseph Price, A. J. Shoemaker, Edwin J. Stedem, J. H. J. Upham, Thomas A. Vogel, Fred H. Weber, Mary J. Weber.

Canton—C. N. Clark, A. A. Fisher, L. L. Frick, Emerson Gillespie, Fred G. King, E. O. Morrow, Chester M. Peters, C. A. Portz, Fred H. Stires, Homer V. Weaver, G. F. Zinninger.

Dayton—Sterling H. Ashmun, Charles E. Burgett, Lloyd H. Cox, M. E. Coy, F. J. Driscoll, H. C. Hanning, W. H. Hanning, Jerome Hartman, Albert F. Kuhl, J. W. Millette, Benedict Olch, Raymond E. Tyvand, W. Burnett Weaver.

Toledo—Warren A. Baird, O. S. Brigham, H. A. Brunsting, R. M. Crumrine, Evan G. Galbraith, Warren W. Green, Barney J. Hein, L. A. Levison, John T. Murphy, Howard J. Parkhurst, Claude E. Price, Clarence D. Selby, Thad W. Taylor, C. W. Waggoner, Samuel D. Zuker.

OTHERS WHO REGISTERED

Millard C. Beyer, Laura Dasef, Carl R. Steinke, Akron; D. D. Hamlin, Alliance; Edwin A. Murbach, Archbold; Taylor Smith, Avon; Charles D. Slagle, Centerville; John W. Franklin, Chillicothe; A. M. Wilkins, Delta; J. C. Sommer, Grove City; George Benzing, Jr., Hamilton; Frank Morris, Lima; O. H. Schettler, Mansfield; F. P. Sutherland, Martins Ferry; B. F. Wills, McArthur; Hyman Helfman, Middletown; G. D. Underwood, Navarre.

J. L. Webb, Nelsonville; V. N. Marsh, Painesville; Clyde M. Fitch, James W. Fitch, A. P. Hunt, George E. Obrist, J. W. Obrist, Portsmouth; H. L. Sowash, Sandusky; Wade K. Chamberlin, Paul J. Leahy, Tiffin; Charles C. Berlin, Roy C. Hunter, Wapakoneta; James F. Wilson, Washington C. H.; Hazel L. Sproull, West Union; Ben R. McClellan, Xenia; John E. L. Keyes, Walter O. Mermis, Youngstown.

Veteran Staff Members Honored

Four physicians who have served a combined total of 100 years on the staff of St. Mary Hospital, Cincinnati, were honored in a testimonial program presented at the hospital recently. The honored physicians are: Dr. J. T. Clear, Dr. Theodore J. Wenning, Dr. E. O. Porter and Dr. Francis X. Siegel. They have all been members of the staff of the hospital since April, 1913. Speakers at the event included Dr. William A. Teveluwe and Dr. Theodore W. Schmidt.

LEGISLATURE FINALLY AGREES ON POOR RELIEF PROGRAM FOR BALANCE OF 1938: PROVISIONS OF ACTS REVIEWED

THE third special session of the 92nd Ohio General Assembly which convened May 16, adjourned sine die July 8. Although the Legislature was called into special session primarily to enact measures for the financing of poor relief, 62 bills on varied subjects were introduced in the House of Representatives and 36 in the Senate, of which 28 were finally enacted during the eight weeks' session.

As stated in the July issue of *The Journal*, page 820, the House and Senate were deadlocked almost to the end on the provisions for financing poor relief. The program finally agreed upon is based entirely on a policy of borrowing against anticipated revenues from existing taxes. A resumé of the various measures follows:

S.B. 462. To extend the utilities excise tax of .65 of 1 per cent and the admissions, beverage, malt and wort taxes through 1941 with revenues allocated for relief; counties receiving state aid to match relief grants dollar for dollar and to issue bonds with a maximum maturity of March 1, 1942, in anticipation of the revenue, by a majority vote. Counties needing no relief funds to apply their allocation for the reduction of real estate taxes and assessments.

S.B. 475. To authorize local subdivisions to issue notes in anticipation of the collection of fees for liquor permits up to 90 per cent until December 31, 1938.

S.B. 498. To authorize political subdivisions, except school districts, to issue notes against delinquent taxes up to 70 per cent of the delinquency.

H.B. 852. Appropriating unclaimed dividends and deposits of closed banks for poor relief. A Senate amendment diverts unclaimed dividends to the county treasurer as custodian, subject to the jurisdiction of the state superintendent of banks. This bill was vetoed by the Governor.

S.B. 463. Authorizing subdivisions by a 65 per cent vote prior to December 31, 1940, to issue bonds for poor relief in anticipation of the collection of delinquent taxes.

S.B. 486. To appropriate $1,500,000 from anticipated 1939 Sales Tax collections to the State Board of Control, to be allocated immediately on the basis of needs to local subdivisions for relief.

H.B. 840. To authorize municipal corporations and townships to expend for poor relief purposes during 1938 and 1939, the surplus inheritance tax revenues in excess of budget and debt service requirements.

S.B. 489. To permit political subdivisions to transfer relief funds to county commissioners where the county assumes the full responsibility for relief.

It is estimated that the extension of the utility excise tax for three years will yield approximately $16,000,000. Under the provisions of S. B. 462, political subdivisions are permitted to borrow up to 80 per cent of the anticipated revenues. Approximately $5,000,000 is said to be available under S.B. 465 which permits cities to borrow up to 90 per cent of their 1939 liquor and beer permit receipts. S. B. 463, authorizing subdivisions to borrow against delinquent taxes to be collected in the future, is estimated to make available from $3,000,000 to $30,000,000, depending on the application of the provisions of the Act by various municipalities.

S.B. 465 establishes the office of state relief director to supervise the allocation of state funds. Administration of poor relief remains a responsibility of local subdivisions, under the provisions of the Act. Cost of administration is limited to 12 per cent, and cost of a pre-audit in each county by the State Auditor before funds are allocated, is limited to 1 per cent of poor relief expenditures. The definition of poor relief, for which state funds may be expended, includes the phrase, **"physicians' services wherever rendered".**

Under authority granted in S. B. 478 a nine-member commission is to investigate poor relief financing and administration and report to the General Assembly not later than December 31, 1938.

Miscellaneous legislation enacted during the session included: S.B. 467, creating a state building authority of three members authorized to issue $7,500,000 in bonds to be matched by $6,000,000 of Federal funds, for a building program for state welfare institutions; S.B. 490, to authorize boards of county commissioners to contribute and aid certain public works projects by acquiring lands to facilitate the construction of Federal veterans' hospitals; S.B. 840, appropriating $642,600 for various projects, including $150,000 for a new hospital at the Soldiers' and Sailors' Home at Sandusky, which was vetoed by the Governor.

Unless the poor relief financing program proves inadequate, no further session of the Legislature is expected until after the election in November, when another special session is anticipated for the purpose of providing for a deficit of $16,000,000 in the School Foundation Program.

Dr. McCormick, Toledo, Elected Grand Exalted Ruler of Elks' Lodge

The highest honor which the Benevolent and Protective Order of Elks of the United States of America can pay one of its members was conferred upon Dr. Edward J. McCormick, Toledo, member of The Council, Ohio State Medical Association, at the national convention of the organization at Atlantic City in mid-July when Dr. McCormick was elected grand exalted ruler.



Dr. McCormick had held numerous high offices in the lodge, having served as exalted ruler of the Toledo Lodge, district deputy grand exalted ruler, grand esteemed leading knight, member of the board of trustees of the Ohio Elks' Association Scholarship Foundation, grand esquire, member of the Grand Lodge Activities Committee, and for the past three years as grand treasurer.

His prominence and active interest in the Elks' Lodge have not prevented Dr. McCormick from making many contributions to the scientific and organized activities of his profession. He is a past-president of the Toledo Academy of Medicine, former chairman of the Surgical Section, Ohio State Medical Association, fellow of the American Medical Association and the American College of Surgeons, member of the surgical staffs of leading Toledo hospitals, member of Alpha Omega Alpha, and as stated, Councilor of the Fourth District, Ohio State Medical Association.

Also, Dr. McCormick has taken an active interest in civic and community affairs of his home city. He is past-president and member of the board of directors, Toledo Lions' Club; chairman of the court of honor, Toledo Area Council, Boy Scouts; a trustee of Toledo University and the Toledo Chapter, American Red Cross; and past-president of the Toledo City Manager League. During the World War he served in the medical corps with distinction, being discharged with the rank of major.

Following his election Dr. McCormick was asked by newspaper reporters to reveal plans for activities of the lodge during his administration. One interview quoted him as follows:

"'The members in each city,' he said, 'will assume the responsibility for promoting local civic measures such as hospitals, public works, traffic safety and other constructive efforts which can render real patriotic service.

"'I feel that despite general conditions of uncertainty and discouragement in many quarters, we are just now on the eve of one of the greatest eras of prosperity which America has ever experienced.'

"Dr. McCormick took a firm stand against governmental control and interference in any business or profession, whether it was the operation of railroads, private corporations or medicine, stating that the latter profession is the best example of the mistaken idea that any profession can be regimented by self-seeking politicians.

"'Any steps which are taken to so control medicine will end in failure,' he said. 'Benevolence and charity should be practiced, as in the Order of Elks, without accompanying fanfare... so the Elks will continue the policy of throwing the whole weight of their order both in man power and financial influence to continue our quiet and unassuming philanthropy.'"

New Secretary In California

Dr. George H. Kress, Los Angeles, a graduate of the University of Cincinnati, College of Medicine, 1899, has been appointed secretary-treasurer and public relations director of the California Medical Association, succeeding Dr. Frederick C. Warnshuis who held those positions for the past four years after serving for many years as secretary of the Michigan State Medical Society. Dr. Kress will continue to edit *California and Western Medicine*, official publication of the California Medical Association but has relinquished his positions as a member of the California State Board of Health, dean of the Los Angeles Medical Department, University of California, and president of the Los Angeles County Medical Association.

Dr. Warnshuis has accepted the presidency of the American Medico-Legal Association with headquarters in Boston, which aims to coordinate all branches of the medical profession and to seek uniformity in rules and regulations dealing with medico-legal work. He will serve as editor of the association's bimonthly publication, the first issue of which will appear in September.

Medical Library Project Delayed

Although the 75th Congress passed a measure to provide $3,750,000 for the construction of a new building for the Army Medical Library, Washington, D. C., in the adjournment rush no appropriation was made for it. A compromise provision of $1,250,000 in the appropriation bill to start the work was lost in committee. Army, navy and private medical organizations have tried for the last ten years to gain approval for a new structure to replace the present brick and wood building erected in 1887. Failure to provide the necessary appropriation will block for at least another year the attainment of modern fireproof quarters for the Library.

Quaker City—Dr. M. S. Lawrence received a fractured skull when he was struck by an automobile.

Standards for Re-Opening of Hospital Dispensaries Are Adopted by Mahoning County Medical Society

Following thorough investigation and consideration by its Hospital Relations Committee, the Mahoning County Medical Society on June 21 adopted a recommendation of that committee that the free dispensaries of Youngstown hospitals be re-opened under the following definite conditions:

"1. That the dispensary shall not interfere in any way with the present relief plan. Patients on relief will not be admitted except upon request of their attending physician and then, for diagnostic purposes only.

"2. Admit only patients that are on a mere sustenance level.

"3. Patients shall be admitted by the following methods:

"(a) Patients may be admitted by a request in the form of writing from their attending physician.

"(b) By direct application to the Director of the dispensary, when the patient has no attending physician.

"(c) All patients, including Groups A and B, shall be investigated as to their financial circumstances by an investigator, who shall report to the Medical Director of the dispensary. The Medical Director, who must be a member of the Mahoning County Medical Society, shall then determine the patient's eligibility for admittance to the dispensary.

"4. The conduct of the dispensaries shall be under the direction and supervision of the Dispensary Committee of the respective staffs of the hospitals."

In addition the society adopted the following resolution, re-affirming the present policy of the society:

"The Citizens of Mahoning County and Youngstown hereby have the promise and the pledge of our members that, if the said citizens will supply the necessary place, facilities, and equipment for doing the work, we as a profession, individually and collectively, will see that any man, woman, or child within our midst, who has no available resources, and is unable to obtain such, with which to pay for medical services, shall receive such services when and as needed, regardless of any question of compensation therefor."

Dr. Lawrence A. Pomeroy, Cleveland, a member of the Faculty of Western Reserve University School of Medicine, was elected president of the American Radium Society at its recent meeting in San Francisco and a member of the American Association for Cancer Research.

A. M. A. Distinguished Service Medal Awarded to Dr. Rudolph Matas

At the opening session of the House of Delegates of the American Medical Association at San Francisco, June 13, the first A.M.A. medal for distinguished service to scientific medicine was awarded to Dr. Rudolph Matas, New Orleans.

The Committee on Distinguished Service Award, established at the 88th Annual Session of the A.M.A. in Atlantic City last year, had considered 22 names for the honor. In accordance with the procedure outlined in the By-Laws, five of these names were submitted to the Board of Trustees, which selected by ballot the following names for consideration by the House of Delegates: Dr. Simon Flexner, New York; Dr. Ludvig Hektoen, Chicago, and Dr. Matas. Of the 136 votes cast by the delegates, Dr. Matas received 75; Dr. Hektoen, 35 and Dr. Flexner, 26.

A native of Louisiana, Dr. Matas received his degree in medicine from Tulane University in 1880. After 15 years in the practice of medicine in New Orleans, he became professor of surgery at Tulane University in 1895. Since 1928 he has been emeritus professor of surgery in that institution. Dr. Matas is internationally known for his learned writings on surgical subjects, especially in the field of vascular surgery. He has received honorary degrees from Princeton University, University of Pennsylvania and several other universities; has been decorated by the governments of Venezuela, Spain, France and Cuba and is a member of innumerable surgical societies throughout the world.

New Pamphlet on Syphilis

A new edition of the pamphlet, "Syphilis, Its Cause, Its Spread, Its Cure," has been published by the United States Public Health Service. The illustrated folder is written in understandable lay terms. It is suggested by the U. S. Public Health Service that a copy be given each syphilitic patient on the occasion of his first visit. The new folders are being sold by the Superintendent of Documents, Washington, D. C., for $1.00 per 100, in smaller quantities five cents each.

Sperti Sun Lamp Not Approved

The Council on Physical Therapy of the A.M.A. reports that the Sperti Sun Lamp (table model), Type SL 110, manufactured by the Science Laboratories, Inc., Cincinnati, has been investigated and that the Council voted not to include it in its list of accepted devices "because (1) the ultraviolet radiation characteristics do not conform with the requirements adopted by the Council for sun lamps, and (2) the advertising matter contains misleading or unwarranted claims."

Do You Know - - -

Representatives of eight Ohio Valley states have agreed upon an interstate river pollution compact, which will be submitted to the state legislatures of Ohio, New York, Pennsylvania, Kentucky, Illinois, Tennessee, West Virginia and Indiana, for ratification.

* * *

Patients in adjoining hospitals in the University of Pittsburgh Medical Center were not disturbed by the staccato beat of riveters during the construction of the steel framework for the new 13-story Woman's Hospital in the midst of the Center as a stipulation of the hospital's Board of Directors was that the structure should be arc-welded.

* * *

Dr. Joseph T. Smith, assistant clinical professor of obstetrics, Western Reserve University School of Medicine and a former editor-in-chief of *The Bulletin of the Academy of Medicine of Cleveland*, has joined the faculty of Tufts College of Medicine, Boston, to teach gynecology and obstetrics to general practitioners in short courses, under the provisions of the Bingham's Associates Fund.

* * *

Grover C. Maxwell, Hicksville; Robert M. Betz, Gallipolis; and Mrs. Alma Smith Leine, Cleveland, have been appointed by Speaker Frank C. Uible as the three members of the House of Representatives on the commission authorized by the Legislature to study and prepare anti-venereal disease legislation.

* * *

The American Social Hygiene Association is planning a state-wide program in Ohio, which will include a conference in Columbus, October 4-7.

* * *

In the last 15 years, 441,912 persons have been killed in the United States by automobiles.

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The booklet on "Health Cures", one of a series of eight published by the National Association of Better Business Bureaus for the information of consumers, deserves a place in every physician's reception room. Copies may be obtained from any branch of the Bureau for three cents each.

* * *

According to the results of a recent study published in the *Milwaukee Medical Times*, chances for collection of accounts 60 days past due are 90 per cent; of accounts six months past due, 67 per cent; of accounts one year past due, 45 per cent; and of accounts two years past due, 23 per cent.

Ohio ranked 17th among the states in cancer mortality during 1936, according to a recent report issued by the Bureau of the Census, U. S. Department of Commerce. The rate per 100,000 population was 127.5, as compared with 111 for the entire country. Massachusetts headed the list with a rate of 153, and Arkansas had the lowest rate—50.

* * *

Approximately 300,000 students in American colleges and universities—or nearly 25 per cent of the entire enrollment—are handicapped in their studies by serious visual defects, it was contended in a report of the Eye Health Committee of the American Student Health Association, of which Dr. R. W. Bradshaw, director of student health, Oberlin College, is chairman.

* * *

New officers of the Alumni Association of the University of Cincinnati College of Medicine are: Dr. Robert H. Kotte, Cincinnati, president; Dr. Richard D. Bryant, Cincinnati, vice-president, and Dr. Mabel E. Gardner, Middletown, secretary-treasurer.

* * *

Statistics show that there are about 20,000 suicides each year in the United States.

* * *

In order to prove eligibility for aid to dependent children under the provisions of the Federal Social Security Law, more than 20,000 records of birth have been checked in the State Division of Vital Statistics since August, 1936.

* * *

The United States Public Health Service has designated Cleveland, Atlanta, Ga., and a rural community in Michigan as points for conducting a survey for incidence of cancer.

* * *

At the request of the Commissioners of the District of Columbia, the U. S. Public Health Service is making a survey of Washington's health problems, in cooperation with the local health department.

* * *

Dr. Maxwell Harbin, Cleveland, was re-elected secretary of the Eastern Surgical Society at its recent annual meeting in Richmond, Va.

* * *

Dr. Holman Taylor, veteran secretary of State Medical Association of Texas, was guest of honor at a testimonial banquet at the Blackstone Hotel, Fort Worth, recently, commemorating his retirement as Brigadier General commanding the 61st Field Artillery of the Texas National Guard. The affair marked the end of 47 years of military service by Dr. Taylor.

INTRODUCING . . .

Personnel of the Newly-Created Judicial and Professional Relations Committee, Ohio State Medical Association

This month's cover page introduces to the membership the members of the new Judicial and Professional Relations Committee of the Ohio State Medical Association.

Through revision of the Constitution and By-Laws by the House of Delegates at the 1938 Annual Meeting of the State Association, the creation of this committee was authorized and the present committee was appointed by Dr. Barney J. Hein, the President.

The duties of this important committee are: (1) to investigate at the request of The Council questions and controversies arising under the Constitution and By-Laws of the State Association and under the Principles of Medical Ethics, and to serve as a board of review with respect to proposed amendments to constitution and by-laws of component societies; (2) to act in an advisory capacity to legal counsel of members who are sued or threatened with suit for alleged malpractice concerning the medical aspects of such cases, to examine evidence submitted by a member, and to check legal questions of general interest to members; (3) to disseminate information relative to the causes of malpractice suits and methods of prevention.

Something about those selected to carry on the activities of this committee as outlined above, follows:

Leslie L. Bigelow, Columbus, chairman; former president, Ohio State Medical Association; former chairman, Committee on Medical Economics; former member of old Publication Committee; member of House of Delegates, State Association; graduate of Harvard Medical School, 1906; associate professor of surgery, Ohio State University, College of Medicine; fellow, American Medical Association and American College of Surgeons.

Jacob E. Tuckerman, Cleveland; chairman, former Committee on Medical Defense from 1916 to 1937; former member of The Council; former member of Publication Committee; member of House of Delegates, State Association; former delegate to American Medical Association; membership for many years on important committees of Cleveland Academy of Medicine and governing bodies of the academy; graduate, Cleveland College of Physicians and Surgeons, 1902; fellow, American Medical Association.

John A. Caldwell, Cincinnati; former president, Ohio State Medical Association; former member, The Council, State Association; former president, Cincinnati Academy of Medicine; member, Sub-Committee on Workmen's Compensation, State Association; graduate Miami Medical College, Cincinnati, 1902; professor of clinical surgery, University of Cincinnati, College of Medicine; attending surgeon, Cincinnati General Hospital; surgical staffs, Christ, Bethesda and Children's hospitals, Cincinnati; fellow, American Medical Association.

James G. Kramer, Akron; former member, Sub-Committee on Poor Relief, State Association; member of Committee on Medical Economics and Committee on Hospital Insurance, Summit County Medical Society; graduate, Western Reserve University, School of Medicine, 1915; member, American College of Physicians and American Academy of Pediatrics; visiting pediatrician, Akron Children's and St. Thomas hospitals; fellow, American Medical Association.

George A. Woodhouse, Pleasant Hill; former member, Sub-Committee on District Meetings, Ohio State Medical Association; former president, Second Councilor District Society; secretary-treasurer, Miami County Medical Society since 1928; member of staff, Piqua Memorial Hospital; graduate, University of Cincinnati, College of Medicine, 1924; fellow, American Medical Association.

Large Crowd Attends Eighth District Meeting at McConnelsville

Approximately 300 physicians attended the annual midsummer meeting of the Eighth Councilor District of the Ohio State Medical Association at the Rocky Glen Sanatorium, McConnelsville, Thursday, June 23. Dr. Donald G. Ralston, resident medical director of the Sanatorium, acted as temporary chairman of the business session which followed the luncheon. H. A. Phillips, superintendent of the Sanatorium, gave the address of welcome, after which Dr. E. R. Brush, Zanesville, Eighth District Councilor, made a short talk in which he urged all physicians to cooperate in the A.M.A. Survey of Medical Care. Others called upon by Dr. Ralston for brief remarks were: Dr. Walter H. Hartung, State Director of Health; Dr. Lee Humphrey, Malta, member of the State Medical Board; Dr. James Ball Naylor, Malta; Dr. Frank Warner, Columbus, and Dr. Louis Mark, Columbus, host for the occasion. Major Norman Imrie, of the editorial staff of the *Columbus Dispatch*, gave an address on the topic, "What America Needs".

The following new officers of the district society were elected: Dr. George A. Gressle, Newark, president, and Dr. Donald R. Sperry, Newark, secretary.

Dr. E. Galen Rex, McConnelsville, secretary of the Morgan County Medical Society, presided over the scientific portion of the program. The speakers were Dr. George W. Crile, Cleveland, on "Clinical Aspects of Essential Hypertension and Recurrent Hyperthryroidism", and Dr. Louis J. Roth, Columbus, on "Educational Campaign Against Syphilis in Columbus, Ohio".

IN MEMORIAM

George Bartram Booth, M.D., Toledo; Toledo Medical College, 1907; aged 57; former member of the Ohio State Medical Association and the American Medical Association and Fellow of the American College of Surgeons. Dr. Booth died recently in California, where he had lived for the past year. He had practiced in Toledo for 25 years, where he was a member of the staff of Mercy Hospital. Dr. Booth was a member of the American Legion and during the World War was a captain in the Medical Corps of the U. S. Army.

James Warren Brewer, M.D., Dayton; Ensworth Medical College, St. Joseph, Mo., 1908; aged 60; died June 5. For the past 13 years Dr. Brewer, attached to the Veterans Administration Facility, has been in charge of the X-ray department of the Edwin C. Brown Hospital at the National Military Home in Dayton. Following service as a captain in the Spanish-American War, he studied medicine and later returned to army service. Dr. Brewer was a member of the Masonic Order, the Eagles, the Sojourners and the Baptist Church. Surviving are his widow, a sister and two brothers.

Warren Coleman, M.D., Troy, Medical College of Ohio, Cincinnati, 1888; aged 73; member of the Ohio State Medical Association and Fellow of the American Medical Association and the American College of Surgeons; died June 11. Dr. Coleman, the third generation of his family to be a physician, had practiced in Troy for 50 years. For 15 years he operated his own hospital, and when Stouder Memorial Hospital was built in Troy he was its first chief of staff. Active also in the civic life of the community, Dr. Coleman was chairman of the county board of health, and a staunch member of the Masonic Order and the Episcopal Church. He is survived by his widow and a sister.

S. Morton Creswell, M.D., Tacoma, Washington; Rush Medical College, Chicago, 1926; aged 39; former resident of Greene County, Ohio, died July 8. Dr. Creswell was a native of Cedarville and a graduate of Cedarville College. He formerly taught school in Xenia Central High School. He leaves a widow, two daughters, his parents and three sisters.

Edgar Sargent Ferris, M.D., Columbus; Miami Medical College, Cincinnati, 1888; aged 72; died July 7. Dr. Ferris began the practice of medicine in Cincinnati, subsequently went West, and for the past 28 years was located in Columbus. He was a member of the Baptist Church and the Modern Woodmen of the World. Surviving are his widow, two daughters, two sons, two sisters and a brother.

George H. Harbarger, M.D., Coalton; Ohio Medical University, Columbus, 1893; aged 67; died June 17. Coalton's only physician, Dr. Harbarger had practiced in that community for 44 years. Surviving are his widow, and a brother—Dr. John W. Harbarger, Jackson.

Robert C. Heflebower, M.D., Cincinnati; Miami Medical College, Cincinnati, 1889; aged 73; former member of the Ohio State Medical Association and the American Medical Association; Fellow of the American College of Surgeons and member of the American Board of Ophthalmology; died June 3. Dr. Heflebower had been consulting ophthalmologist for the Baltimore and Ohio Railroad in Cincinnati for more than 40 years. Surviving are two sisters and a stepson, Dr. Herman Keck, Cincinnati.

Joseph Peters Hershberger, M.D., Lancaster; Hahnemann Medical College and Hospital of Philadelphia, 1881; aged 82; died June 11. Dr. Hershberger had practiced in Lancaster for 57 years. He was city health commissioner for 12 years and had been active in community affairs. He was a member of the Masonic Order. A son and a daughter survive.

Charles M. Hole, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1898; aged 70; member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 16. Dr. Hole practiced in Cleveland for 40 years. He was a member of Cleveland Medical Library Association and the Presbyterian Church. His widow and three brothers survive.

F. Marion Kent, M.D., Bellevue; Medical College of Ohio, Cincinnati, 1889; aged 73; died July 10. Dr. Kent, a member of the Ohio State Medical Association, Fellow of the American Medical Association and Fellow of the American College of Surgeons, was a native of Greene County and had practiced at Bellevue since 1906, formerly at Lowell and Spring Valley. He was a former president of the Sandusky County Medical Society and was one of the founders of the Bellevue Hospital. Dr. Kent belonged to the Masonic and Elks' lodges. Surviving are one daughter, two sons, one brother and one sister.

Foy C. Payne, M.D., Dayton; University of Cincinnati, College of Medicine, 1917; aged 44; member of the Ohio State Medical Association

and Fellow of the American Medical Association; died June 15. Dr. Payne was head of the pathology departments at St. Elizabeth and Good Samaritan hospitals. He was a member of the American Society of Clinical Pathologists; past president of the Kiwanis Club; and past director of the Miami Valley Field Trials Association. His widow, two daughters and his mother survive.

L. A. Park, M.D., Lancaster; Starling Medical College, 1892; aged 80; died July 1. Dr. Park had not been in active practice for the past 30 years. His widow, two daughters and one sister survive.

Frank Douglas Phinney, M.D., Cincinnati; University of Pennsylvania School of Medicine, Philadelphia, 1899; aged 65, member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons and member of the American Academy of Ophthalmology and Oto-Laryngology; died May 30. A native of Canada, Dr. Phinney practiced for 35 years in Cincinnati. For several years he was chief of staff of Bethesda Hospital. Surviving are his widow and a son.

Feibisch Rukhaus, M.D., Cleveland; Medizinische Fakultat der Universitat Wien, Austria, 1924; aged 44; member of the Ohio State Medical Association and Fellow of the American Medical Association; died July 12.

Chase A. Shafer, M.D., Chester, West Virginia, Chicago College of Medicine and Surgery, 1917; aged 50; died June 26. Dr. Shafer was a member of the East Liverpool City Hospital staff. He leaves two brothers.

B. Ethelbert Watterson, M.D., Continental; Ohio Medical University, Columbus, 1902; aged 69; member of the Ohio State Medical Association; died July 3. Dr. Watterson was a native of Putnam County and had practiced at Continental since his graduation from medical school. He was a member of the Methodist Episcopal Church, Masonic orders and the board of education. Surviving are his widow, one son, two daughters, one step-daughter, one sister and two brothers, one of whom is Dr. John D. Watterson, Kalida.

John Joseph Wenzke, M.D., Howard, Pa.; Ohio State University College of Medicine, Columbus 1929; former member of the Ohio State Medical Association and the American Medical Association; died May 31. Dr. Wenzke had been in ill health for several months. He was formerly on the staff of Mercy Hospital, Columbus. His widow, a son and his mother survive.

Albert J. Weston, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1889; aged 81; died June 29. Dr. Weston retired three years ago, after having practiced in Cleveland for 46 years. Surviving are his widow and two daughters.

Frank E. Wilson, M.D., Jeffersonville; Hahnemann Medical College and Hospital of Philadelphia, 1891; aged 71; former member of the Ohio State Medical Association and the American Medical Association; died June 7. Dr. Wilson retired two years ago after practicing medicine in the Fayette County community for over 40 years. His daughter survives.

Appointments at Western Reserve

Among recently announced appointments and promotions in the faculty of Western Reserve University are the following in the School of Medicine:

Appointments: Charles H. Garvin, clinical instructor in genito-urinary surgery; Charles S. Higley, clinical instructor in medicine; Bernard B. Larsen, clinical instructor in surgery; Frederick R. Mautz, surgery instructor; Walter F. Schwartz, instructor in dermatology and syphilology; Reginald A. Shipley, instructor in medicine; V. Leslie Tichy, clinical instructor in surgery; Peter P. Werle, anatomy instructor; George Magun, biochemistry instructor. **Promotions:** Harold Feil, associate clinical professor of medicine; Donald M. Glover, associate clinical professor of surgery; Robert L. Faulkner, assistant professor of gynecology; Edward H. Cushing, assistant clinical professor of medicine; Harry Hauser, assistant professor of roentgenology; William C. McCally, assistant clinical professor of surgery; Paul G. Moore, assistant clinical professor of ophthalmology; M. Paul Motto, assistant clinical professor of ophthalmology; Harley A. Williams, assistant clinical professor of medicine; Edmund E. Beard, senior clinical instructor in medicine; Ralph L. Cox, senior clinical instructor in medicine; Josephine K. Dirion, senior clinical instructor in ophthalmology; Fred W. Dixon, senior clinical instructor in otolaryngology; Roger O. Egeberg, senior clinical instructor in medicine; John E. L. Keyes, senior clinical instructor in ophthalmic pathology; Samuel C. Lindsay, senior clinical instructor in nervous diseases; Leonard R. Ravitz, senior clinical instructor in nervous disease; James V. Seids, senior clinical instructor in surgery; Mortimer L. Siegel, senior clinical instructor in medicine; Hiram O. Studley, senior clinical instructor in surgery; Ivan F. Weidlein, senior clinical instructor in otolaryngology.

College of Physicians' Meeting Dates

The Twenty-Third Annual Session of the American College of Physicians will be held in New Orleans, with general headquarters at the Municipal Auditorium, March 27-31, 1939. Dr. William J. Kerr, San Francisco, president, will have charge of the program. Dr. John H. Musser, New Orleans, has been appointed general chairman of the meeting. Additional information concerning the meeting can be obtained by addressing Dr. E. R. Loveland, executive secretary, American College of Physicians, 4200 Pine St., Philadelphia, Pa.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

CLINTON

Dr. Robert Conard, delegate from the Clinton County Medical Society, gave a report on the 92nd Annual Meeting of the Ohio State Medical Association held at Columbus, May 11-12, at a meeting of the Society June 7, at the General Denver Hotel, Wilmington.—News clipping.

HAMILTON

Dr. E. O. Swartz was named president-elect of the Cincinnati Academy of Medicine at its recent annual meeting. Dr. Richard S. Austin, elected a year ago, is the incoming president, succeeding Dr. Charles D. Heisel. Other officers recently elected are: Dr. Robert E. Howard, secretary; Dr. Daniel J. Kindel, treasurer; Dr. John H. Skavlem, trustee; Dr. Howard D. Fabing and Dr. Henry B. Freiberg, delegates; and Dr. Lloyd B. Johnston and Dr. William J. Topmoeller, alternates.—News clipping.

WARREN

The motion picture "Syphilis" was shown by the State Department of Health at a meeting of the Warren County Medical Society, Tuesday evening, June 7, at Lebanon.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

GREENE

At the July meeting of the Greene County Medical Society the guest speaker was Dr. H. H. Wagner, Dayton, who discussed "Vaginal Discharge; Its Diagnosis and Treatment". Dr. Ben R. McClellan, Xenia, a delegate to the American Medical Association, reviewed the proceedings of the House of Delegates of the A.M.A. at the recent San Francisco session.

At the June meeting of the society during the business session, the following resolution was adopted: "Resolved that no member of the Greene County Medical Society shall take part in any free clinic, free examinations or other third party services for reduced fees until such project has been approved by the society".—Donald F. Kyle, M.D., secretary.

Sixth District

(COUNCILOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

MAHONING

At the June 21 meeting of the Mahoning County Medical Society, the program was presented by interns, contesting for prizes awarded by the society. Winners were: Dr. Densmore Thomas, first, "Trichiniasis" and Dr. Don A. Miller, second, "Stab Wound to the Left Side of the Chest". Other contestants were: Dr. Harold J. Reese, "Cardio-Vascular-Renal Cerebral Disease", and Dr. George L. Ambrecht, "Ovarian Pregnancy". The judges, Dr. R. E. Whelan, Dr. F. W. McNamara, Dr. C. R. Clark, Dr. John Heberding, Dr. A. E. Brant and Mr. George Madtes, local newspaper reporter, stated that the prizes were awarded on delivery alone as all papers were characterized by scientific excellence. The winners used no manuscripts.

At the business session, the society voted approval of the re-opening of the hospital dispensaries under definite conditions. A review of the society's action and conditions stipulated is published elsewhere in this issue of *The Journal*. —Bulletin.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

Dr. David Steele, Cleveland, discussed "Deep X-ray Therapy" at a meeting of the Tuscarawas County Medical Society, Thursday evening, June 9, at the office of Dr. C. J. Miller, New Philadelphia.—News clipping.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

FAIRFIELD

Dr. Harry L. Reinhart, Columbus, was the guest speaker at a meeting of the Fairfield County Medical Society, Tuesday noon, June 14, at Lancaster.—News clipping.

GUERNSEY

At the bi-monthly meeting of the Guernsey County Medical Society, June 16, the film, "Syphilis" was shown and the State Department of Health's policy on the treatment of syphilis was reviewed by Dr. W. P. Johnson of the department.—O. Reed Jones, M.D., secretary.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

SCIOTO

"Tuberculous and Non-Tuberculous Chronic Lung Infections", was the subject presented by Dr. John H. Skavlem, Cincinnati, at a meeting of the Hempstead Academy of Medicine of Scioto County, Monday evening, June 13, at the Ports-

mouth General Hospital.—W. M. Singleton, M.D., secretary.

Dr. Grace M. Jordan, director of the Mothers' Health Clinic, Columbus, discussed "Birth Control", at a meeting of the Academy, Monday evening, July 11, at the Portsmouth General Hospital.—W. M. Singleton, M.D., secretary.

Cincinnati General's New Interns

The following interns began service at Cincinnati General Hospital July 1: Graduates of the University of Cincinnati College of Medicine—

Albert D. Weyman, Else Krug Weyman, Irwin C. Albert, Gerald W. Blanton, Robert Bradshaw, M. E. CaJacob, Joseph C. Flynn, David Frankel, Robert Garber, J. Robert Hawkins, Jules I. Klein, Calvin O. Koch, Carl W. Kumpe, Raymond Marr, Isador Miller, William U. Neel, Raymond O. Nulsen, Norman O. Shaftel, Victor Strauss, and J. P. Wozencraft.

Graduates of other universities—Julia Baker, Texas; Bernard Bandler, Columbia; J. W. Douglas, Tulane; John F. Eckert, Johns Hopkins; Joseph E. Flynn, Iowa; Norma C. Furtos, Western Reserve; Thurman K. Hill, Emory; Raymond Groendahl, Wisconsin; Henry Holliman, Emory; Herbert F. Kesinger, Ohio State; Arthur Paul Klotz, Chicago; Henry D. Lederer, Rush; William T. Moore, Virginia; Charles Nicholson, Jr., Virginia; H. Rawling Pratt-Thomas, South Carolina; Richard Schroeder, University of Minnesota; Arthur F. Valenstein, Cornell; James L. Whittenberger, Chicago; Carl Wiesel, Michigan, and Ralph L. Zuker, Washington.

Doctors' Orchestra Ends Season

The Doctors' Symphony Orchestra of Akron ended its 12th season June 22, when its 73rd concert was given at Congress Lake Country Club for the Stark County Medical Society. During the season just ended, the orchestra also gave concerts for the Sumner Home for the Aged, Peoples Hospital, Akron City Hospital, St. Thomas Hospital and the Edwin Shaw Sanatorium. The 13th season will open with the resumption of rehearsals in September. Dr. A. S. McCormick, veteran secretary of the Summit County Medical Society, is director of the orchestra. The concertmaster is Dr. D. H. Henninger, Akron dentist. Other members of the executive committee are Dr. R. E. Pinkerton, Dr. C. R. Newton and Dr. J. A. Breth, dentist. Dr. A. Dobkin is assistant concertmaster.

Open New Offices

Physicians who have recently opened new offices in Ohio include the following: Dr. William Knapp, Barnesville; Dr. Paul Reading, Painesville; Dr. J. J. Boldizar, Cleveland; Dr. Michael Matteo, Wickliffe; Dr. Morris Malmud, Sharon Center; Dr. P. E. Drungenbolz, Canton; Dr. E. E. Judd, Wooster; Dr. Milo Rice, Pandora, and Dr. Rufus Snyder, Portsmouth.

Eclectic College to Close in 1939

When the Eclectic Medical College, Cincinnati, graduated its eighty-eighth class in June it was within one graduating class of its end. Next year's class will be the last to be graduated from the college, which will close in June, 1939, due to financial stress. The termination was announced after the 1939 class had matriculated, and no students have been admitted since. A total of 4,400 men and women have graduated from the institution.

Cleveland Academy Gives Special Societies Representation on Its Council

Specialty societies will be represented on the Council of the Cleveland Academy of Medicine in accordance with a recommendation of a committee consisting of Dr. R. S. Dinsmore, chairman; Dr. P. G. Moore, Dr. J. E. Tuckerman and Dr. C. L. McDonald, subsequently approved unanimously by the Academy's Board of Directors.

The recommendation read as follows: "Any society of specialists in Cuyahoga County, not represented by a Section in the Academy, and whose membership is limited to members of the American Medical Association, shall be invited to send a representative to sit on the Council".

Invitations to select such a representative have been sent to the Cleveland Dermatological Society, Cleveland Radiological Society, Cleveland Ophthalmological Club, Cleveland Oto-Laryngological Club and the Cleveland Allergy Society, with the stipulation that the representative must be a member of the Academy.

Cleveland Wants Vet Hospital

Sponsored by the Cleveland Chamber of Commerce and veterans' organizations, an effort is being made to persuade the Federal Government to construct a veterans' hospital in Cuyahoga County. The contemplated structure would cost $2,000,000, and would include a 500 bed hospital, a nurses' home and other necessary buildings. A bill was passed at the recent special session of the Legislature which would permit the county commissioners to acquire the necessary land and present it to the Federal Government.

Continued Rise In Costs of Relief

Costs of public relief in May continued the rise recorded for the 7 preceding months, according to figures issued by the Federal Social Security Board. Total Federal, state, and local costs incurred for aid to the needy in May, including earnings under the works program, amounted to $247,750,000, an increase of $4,831,000, or nearly 2 per cent, over the total for April.

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THE PHYSICIAN'S BOOKSHELF

All unsigned reviews are from the pen of the Editor.

The Practitioners Library of Medicine and Surgery. — Supplement and Index. George Blumer, Editor. D. Appleton, Century Co., New York; pp. 1158.

This large volume of 808 pages of new or revised material and 350 pages of index completes the 13 volumes which have appeared in the last five years. Although there are fundamental objections to any system of medicine, it must be said that they bring together a vast source of material which is unavailable to most practitioners. This present volume is no exception. The printing and stock are excellent. Its weight (8 pounds) does not make it a "lap-book", but such it is not intended. The reviewer amazed himself by practically reading it through in an approximate reading time of 14 hours. The proof reading is excellent. Occasional errors, such as parmocology and clyclopropane, are few. The index is reasonably complete.

The present volume presents a variety of subjects ranging from such little known syndromes as Splenogranulomatosis Siderotica, and Proctalgia Fugax to the Psychological Aspects of Pediatric Practice. The bibliographies of most articles are complete through 1936 and many contain references to the literature of 1937.

Of particular interest to the reviewer were the following: Rowntree admits that status thymico lymphaticus is a clinical entity but he advises against the diagnosis. He mentions the reprehensible practice of X-raying infant thymuses, recalling 20 cases of mental retardation which may possibly have been a result of this practice. His animal experiments with both thymus and pineal extracts are notable achievements. The chapter on Lightning Stroke is fascinating. M. T. Moorehead in a succinct discussion of abdominal apoplexy summarizes very concisely the latest thought on arteriosclerosis and hypertension with particular reference to intra-abdominal bleeding. Albert Vander Veer admirably states the present day concepts of asthmatic "work-ups".

Louis Goodman, the brilliant young pharmacologist at Yale, has summarized the Nobel Prize winning work of Dale, Loewi, Cannon and their collaborators and presents in 41 pages the most complete account of the clinical, pharmacological and therapeutic uses of the neuromimetic drugs which the reviewer is acquainted with. He refers to a hitherto little known fact that a full therapeutic dose of epinephrine in man will result in a rise of blood pressure of 400 m.m. systolic and 300 m.m. diastolic as measured by an optical manometer. He states that benzedrene is almost a specific for the oculogyric crises of Parkinsonism.—Robert C. Kirk, M.D.

Pathology of the Central Nervous System. A Study Based Upon a Survey of Lesions Found in a Series of Fifteen Thousand Autopsies. By Cyrile B. Courville, M.D. Pacific Press Publishing Association, Mountain View, California.

Not because it is so comprehensive, but because it is the opus of a real teacher of a difficult subject, does this book on neuropathology meet a long-felt need. Not only is it replete with fine photographs of cerebral and spinal defects, but its schematic drawings showing all possible neural lesions of syphilis, tuberculosis, birth injuries, hemorrhage and trauma, presented in an impressionable manner should be a delight to every student and novice who ventures into this subject. It is this happy capacity to graphically inform which makes Dr. Courville's book distinctive.

Of special interest is a chapter on intoxications, particularly anesthetics, for Doctor Courville's work on nitrous oxide encephalopathy is an outstanding contribution.—Louis J. Karnosh, M.D.

The Self You Have to Live With. By Winfred Rhoades. $1.75. J. B. Lippincott Company, Philadelphia, 1938; pp. 182.

The author of this book, one time pastor of Eliot Congregational Church in Boston, suffered a nervous breakdown which made it necessary for him to spend several years as an invalid. He conquered himself and now does personality work in the Boston Dispensary. So by training and experience he is exactly fitted to write such a book as this whose "point is that it is possible to build for one's self a world of thought and emotion which shall be a good world, even though the world of outward experience is one of frustration and struggle and disappointment and pain". Every physician is consulted almost daily by unadjusted patients who have been completely frustrated. To all such this book is a good beginning.

Leucemia and Allied Disorders. By Claude E. Forkner, Asst. Prof. of Clinical Medicine at Cornell University Medical School. 333 pages. The MacMillan Company, N. Y., 1938. Price $5.00.

This volume, the first comprehensive treatise on leucemia in any language, presents the subject not only from a practical hematological and

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clinical point of view, but also from the standpoint of the investigator. The subject matter is complete and well handled throughout with the exception of the chapter on Leucosarcoma. Here the author fails to grasp the importance of this manifestation of the disease. Most outstanding, however, and perhaps the most valuable is the comprehensive review of the literature. This feature of the book leaves little to be desired, both in quality of publications cited and in critical interpretation.

Necessarily, this monograph represents the orientation of an hematologist in a field which is poorly understood, and therefore highly controversial. The author, however, has had sound training in hematology and a fair clinical experience so that his handling of the subject and the literature pertaining thereto is probably as satisfactory to any given cross-section of the scientifically minded profession as factual data permits. The book will find its greatest field of usefulness in a reference medical library.—B. K. Wiseman, M.D.

Sexual Maturation and Physical Growth of Girls Age Six to Nineteen. By Frank K. Shuttleworth. A Monograph of the Society for Research in Child Development. Published by the Society in Washington, D. C., 1937; pp. 253.

This study concerns itself with two problems. First, what procedures and statistical methods are appropriate for the analysis of repeated measurements on the same girls? Second, what are the patterns of physical growth among contrasted groups of girls whose first menstruation occurs at different ages?

Dream of Freedom. By E. C. Philtine. $2.50. D. Appleton-Century Company, New York, 1938; pp. 331.

This is a powerful story in which the main character is a sensitive Viennese physician, professor of medicine in a great New York Medical School. It is a well-drawn story of the effects of his evasive love for the wife of one of his patients.

A Textbook of Hematology. By William Magnes, M.D., D.P.H., Pathologist, Saint Michael's Hospital, Toronto, Canada; Lecturer in Pathology, University of Toronto. Cloth. Charts 3, colored plates 3, photomicrographs 23. Philadelphia. P. Blakiston's Son and Co., Inc. 1938; pp. 395.

"There is no short cut to a knowledge of hematology. Colored plates . . . . are of great assistance to the inexperienced laboratory worker, but the idea that any physician who provides himself with an atlas of hematology is equipped for the diagnosis of diseases of the blood, is erroneous." Thus, in the preface, the author of this volume puts himself on solid ground by

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recognizing the chief weakness of many of the existing volumes that treat this subject. Capitalizing on this, the author has produced a text that is very compact (379 pp.) without sacrifice of data that is of value to the practicing physician. After a clear, concise exposition of prevailing theories and facts pertaining to the physiology of blood formation (42 pp.), there follow 70 pages dealing chiefly with the physical characteristics of the blood cells, then 28 pages describe laboratory methods, after which the remaining 230 odd pages are devoted to the blood diseases themselves. These latter chapters, even though short (eg. polycythemia vera runs to 11 pages) contain the essential facts that are of most value to the practitioner. The volume is recommended for the practicing physician.

The Woman's Almanac, 1938. Edited by Antoinette Donnelly and Alice Archbold. $1.00. Oquaga Press, New York, 1938; pp. 331.

Packed full of almost endless facts for and about woman. Much about dress, cosmetics, reducing exercise, homemaking, music and the cinema. From the medical standpoint singularly free of objectionable material, and should serve the purpose for which it was intended.

Practical Bacteriology, Haematology, Parasitology. By E. R. Stitt, M.D., Rear Admiral, U.S.N., Paul W. Clough, M.D., chief diagnostic clinic, Johns Hopkins Hospital; and Mildred C. Clough, M.D., formerly instructor in medicine in the Johns Hopkins University. Ninth edition. P. Blakiston's Sons, Philadelphia, Pa., 1938; pp. 961.

To those of us to whom the first four editions of this manual served as a diagnostic bible, it is amazing to note how our old friend has grown into such a large volume. The familiar form is retained. The outstanding characteristic always has been the almost unbelievable condensation of factual material. Truly it may be said that it is "bigger and better".

Mania—by Lawrence W. Jayson; $2.00. Funk and Wagnalls Company, New York and London, 1937; pp. 263.

Mania is an autobiographical account of the feelings and experiences of an individual through an acute mental illness, "from a straight-jacket to complete liberty". Beginning dramatically with auditory hallucinations which urge the patient to walk into the ocean, the book portrays the course of the illness through various stages toward recovery. Its seventeen chapters record the delusions which he held, then rejected; they describe his attitude towards his environment, his fellow-patients, his treatment. It thus constitutes a log of a patient's progress through the wards or "halls" of a modern sanitarium.

Its style is unusual. It is written in the first person in plain readily understandable language,

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BASIC OPERATIONS IN COMMERCIAL CANNING PROCEDURES

VI. COOLING THE TIN CONTAINER AFTER THERMAL PROCESSING

● On this page we have previously described certain basic operations in commercial canning procedures. These have included cleansing of the raw material; blanching; exhausting or pre-heating; sealing the tin container; and thermal processing of the sealed container. In this—the last of this series—we shall discuss the final basic operation, namely, the cooling of the sealed can immediately after the heat process.

One main reason for rapid and thorough cooling of the can contents—as soon as the objective of the heat treatment has been fulfilled—is more or less self-evident. Prompt cooling checks the action of the heat and thus prevents undue softening in texture or change in color of the food. Also important, particularly in the case of foods of an acid nature, is the prevention of excessive chemical action between the food and the metal container, which may occur if the contents of the can remain hot for an extended period of time. In modern practice, two types of cooling are commonly used, namely, air cooling and water cooling.

Air cooling, as the name implies, involves cooling of the tin container by facilitating radiation of its heat into the air. This type of cooling is adaptable to certain products in small cans. In other products, or in the case of larger cans, it is employed chiefly when the slower loss of heat, characteristic of this cooling method, is essential either for preservation of the food, or for the production of certain quality characteristics in the final product. Modern air cooling is accomplished in well ventilated, specially designed warehouses where the cans are piled in rows, allowing ample space between rows for efficient air circulation.

The several methods of water cooling and the technique by which they are carried out are detailed elsewhere (1). Briefly, water cooling may be effected in a variety of ways. The hot cans may be cooled by admitting water into the retort in which they were processed, or they may be cooled after removal from the retort by conveying the cans through tanks of cold, running water or through cold water showers. Large size, or irregularly shaped cans—processed under steam pressure—must be cooled in the closed retort at the end of the process to avoid undue strain on the containers. This is accomplished by "pressure cooling" in which pressure is maintained in the retort during the cooling of the cans, to counterbalance the pressure which develops during the process within the can itself. Commercially, cans are water-cooled to about 100°F. so that enough residual heat remains to dry the can exterior.

Present day canners are fully aware of the importance of cooling their products rapidly and completely as soon as the process is completed, in order to insure the production of canned foods with high quality characteristics. Consequently, in modern canneries the cooling operations are strictly supervised like the other basic operations in the commercial canning procedure. After inspection and labeling, the cooled cans are then ready to enter distribution channels for delivery to the consumer.

In this series of six discussions, we have attempted not only to describe the basic steps in commercial canning procedures, but also to explain their purposes. We trust this series may help bring a better understanding of this important method of food preservation.

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with a strong undercurrent of humor. Not only the leading character, but his fellow-patients describe their symptoms in their various conversations, using the language conforming to their education and stations in life. The pages thus gain an ease and readability rare in psychiatric literature. The earlier chapters move with the swift action of adventure; the later, however, progress more slowly.

The value of a book such as **Mania** is open to question. It is intended to aid the family of mental patients; for them and for a potential patient, its optimism offers cheer and hope—but the apprehensive person may see the dark cloud and miss the silver lining. For the doctor, this book has the merit of portraying vividly and with considerable accuracy a patient's reaction in a mental illness. However, scientific treatises, though more difficult to study, are richer in material. There is a certain number of interested readers who may find the book helpful, particularly because of its simplicity, optimism and realistic writing. For such interested readers the book Mania may be recommended.—Joseph L. Fetterman, M.D.

More of My Life. By Andrea Majocchi. $2.50. Knight Publications, Inc., New York, 1938; pp. 313.

The autobiography of this Italian surgeon last year under the title, "Life and Death" was a best seller. In this book are presented moving pictures of actual cases; all told simply and attractively. It will be widely welcomed by our profession and the lay public as well.

A Textbook of Clinical Pathology. Edited by Roy R. Kracke, professor of pathology, bacteriology and laboratory diagnosis, Emory University, Atlanta, Georgia. $6.00. William Wood and Company, Baltimore, 1938; pp. 567.

The editor has completed the unfinished text of the late Foster M. Johns of Tulane University. Dr. Johns had enlisted the collaborators of several teachers in medical schools. The completed work has come out as planned with an authoritative person writing the various chapters. Besides Dr. Johns and the editor there are ten other contributors—Alfred P. Briggs, L. W. Diggs, George Herrmann, Francis B. Johnson, Ralph McBurney, Henry E. Meleney, A. J. Miller, Francis P. Parker, V. P. Sydenstricker, and Joel G. Wahlin. It is to be emphasized that this is a book of clinical interpretation and not a book of technique, consequently it is a book that deserves a place in every physician's shelf.

Marriage Among the Yoruba. By Edward Ward, Society of African Missions. 75 cents. Press of the Catholic University of America, Washington, D. C., 1937; pp. 55, two maps.

An interesting contribution to anthropological literature.

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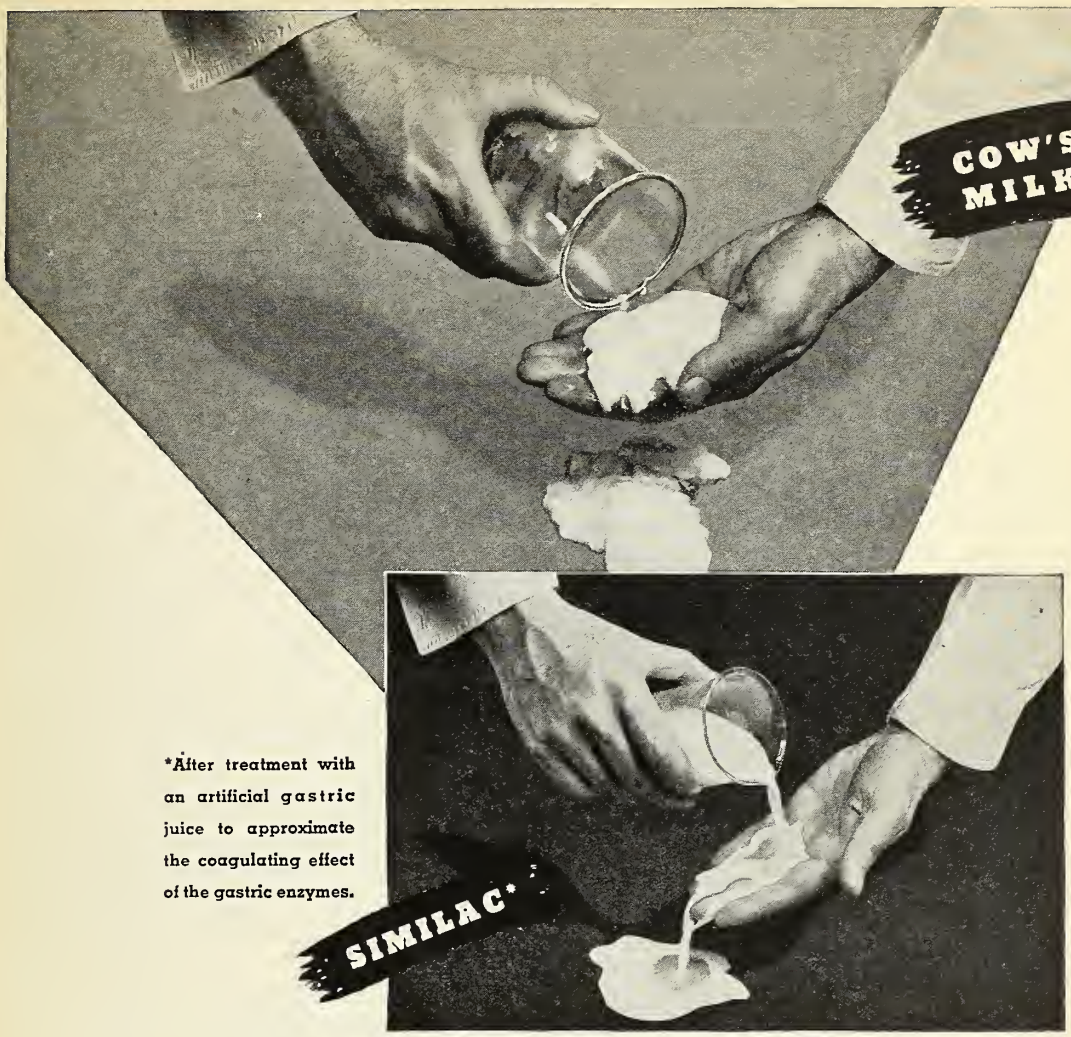
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A.M.A. Sections Honor Ohio Physicians

Ohio physicians named section officers or section delegates at the recent session of the American Medical Association in San Francisco included: Dr. Derrick Vail, Cincinnati, secretary of the Section on Ophthalmology; Dr. A. Graeme Mitchell, Cincinnati, alternate delegate from the Section on Pediatrics; Dr. Russell L. Haden, Cleveland, member of council, Section on Pharmacology and Therapeutics; Dr. Howard T. Karsner, Cleveland, nominee to American Board of Pathology from the Section on Pathology and Physiology; Dr. Clyde L. Cummer, Cleveland, delegate, and Dr. Harold N. Cole, Cleveland, alternate, Section on Dermatology and Syphilology; and Dr. John T. Murphy, Toledo, secretary, Section on Radiology.

Goiter Specialists' Meeting Scheduled

The annual meeting of the American Association for the Study of Goiter will be held at the Mayflower Hotel, Washington, D. C., September 12-14, in conjunction with the Third International Goiter Conference. Among the speakers scheduled to participate in the scientific program are the following from Ohio: Dr. O. P. Kimball, Cleveland; Dr. André Crotti, Columbus; Dr. George W. Crile and Dr. Henry John, Cleveland. Dr. Allen Graham, Cleveland, is chairman of the Program Committee. The scientific sessions are open to all members of the medical profession in good standing. Details concerning the meeting and the program can be obtained by addressing Dr. W. Blair Mosser, corresponding secretary of the Association, Kane, Pa.

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The Godsend Hearing Aid, manufactured by the Godsend Hearing Aid Company, Cincinnati, Ohio, has been considered by the Council on Physical Therapy of the A.M.A. The unit was investigated by a consultant appointed by the Council. In view of his report, the Council on Physical Therapy voted not to accept the Godsend Hearing Aid for inclusion in its list of accepted devices, since "it is an inferior instrument, faulty in mechanical construction and a poor acoustic amplifier. In addition, the advertising matter contains many exaggerated or misleading claims."

Faculty Appointments

The following men have been appointed to the faculty of the New York Polyclinic Medical School and Hospital—Dr. Joseph F. McCarthy, professor of urology and attending urologist; Dr. Charles J. Imperatori, professor of otolaryngology and attending otolaryngologist; Dr. Joseph E. J. King, professor of neuro-surgery and attending nouro-surgeon; Dr. Edward H. Dennen, professor of obstetrics and attending obstetrician.

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O.H.I.

Amount Spent in Ohio During 1937 for Public Aid Totals $142,436,000

The total amount of public aid spent in Ohio in 1937, including W.P.A., social security (aid for aged, aid to dependent children, and aid to needy blind) general relief, both direct and work, and miscellaneous Federal agencies, was approximately $142,436,000, according to a report compiled by the Ohio Institute. The amount does not include any costs of administration, materials or supplies.

W.P.A. accounted for a little over one-half of the $142,436,000; social security, nearly one-fourth, general relief about one-eighth and miscellaneous Federal agencies about one-eighth. The Federal Government furnished approximately three-fourths of the money, the state of Ohio a little more than one-sixth and local governments about one-twelfth.

The report shows that five counties—Cuyahoga, Lucas, Summit, Hamilton and Franklin, accounted for one-half of the amount of public aid of all types. As of last December these counties contained 53.4 per cent of the total W.P.A. families of the state and 55.5 per cent of the families receiving general relief.

Kent—Dr. Joseph C. Fiala is the new grand knight of the local council, Knights of Columbus.

W. R. U. Medical Reunion

More than 200 physicians attended the annual reunion dinner of alumni of Western Reserve University School of Medicine at the Hotel Cleveland, June 14. Grove Patterson, editor of the *Toledo Blade*, was the principal speaker. His subject was "A Reporter Looks at Europe and America". New officers elected were Dr. W. A. Medlin, Cleveland, president; Dr. Donald B. Lowe, Akron, first vice president; Dr. Anton F. Pav, Cleveland, second vice president; Dr. Paul G. Moore, Cleveland, secretary-treasurer, and Dr. Joseph E. McClelland, Cleveland, member of the executive committee.

Dr. Auguste Rhu, Marion, member of the class of 1885, attended the reunion. Seven members of the class of 1888 were also there—Dr. Silas O. Barkhurst, Steubenville; Dr. Harmon E. Blott, Youngstown; Dr. George E. French, Elyria; Dr. George W. Hine, Berlin Heights; Dr. Elliott D. Moore, New Philadelphia, and Dr. Robert A. Kennedy and Dr. Stanton K. Crawford, Cleveland.

Mt. Vernon—An oxygen tent, purchased jointly by the local members of the Moose and the Women of the Moose, was recently presented to the Knox County Medical Society.



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NEWS NOTES

Ashtabula—Extensive improvements, which will provide accommodations for 14 more patients, are being made at General Hospital.

Ashtabula—Dr. George W. Crile, Cleveland, gave a public lecture recently at the High School, on "The Master Animal and His Dilemma". He spoke under the auspices of the Ashtabula County Medical Society.

Bethel—Dr. William E. Thompson celebrated his 103rd birthday on July 6. He is a life-member of the Clermont County Medical Society.

Bucyrus—Dr. D. G. Arnold lectured on "Syphilis" at a recent meeting of the combined church brotherhoods.

Chillicothe—Recent improvements in the operating room facilities and equipment at Chillicothe Hospital cost nearly $10,000, which was donated by a local philanthropist who preferred to remain anonymous.

Cincinnati—Dr. Gordon F. McKim, professor of urological surgery, University of Cincinnati College of Medicine, spoke on "Nephroptosis", at the Seventy-First Annual Meeting of the West Virginia State Medical Association, held at White Sulphur Springs, W. Va., July 11-13.

Cleveland—Dr. Wm. James Gardner spoke on "Surgical Lesions of the Cranial Nerves" at a recent meeting of the Ohio County Medical Society at Wheeling, W. Va.

Columbus—Construction has begun on a $75,000 three-story wing on St. Anthony's Hospital.

Columbus—"What About Medicine?" was the subject discussed by Dr. Elmer G. Horton at a recent meeting of the Chillicothe Lions' Club.

Columbus—Dr. D. B. Gilliam was recently elected chief of staff at St. Anthony's Hospital. Other officers are Dr. J. A. Thone, chairman of staff, and Dr. P. S. Ross, secretary.

Columbus—Dr. John E. Brown, Sr., was recently re-elected President of the Board of Trustees of Ohio Wesleyan University, Delaware.

Dayton—A panel discussion on the value of the Maternal Health Association was presented by Dr. Wilbur A. Ricketts, Dr. J. K. Hoerner, Dr. Albert Hirsheimer and Dr. Phillips Champion, at the recent annual meeting of the local association.

East Liverpool—The Power Class of the First Methodist Church recently presented a suction and pressure unit to City Hospital, in honor of the late Charles R. Boyce, teacher of the class and president of the hospital board for 27 years.

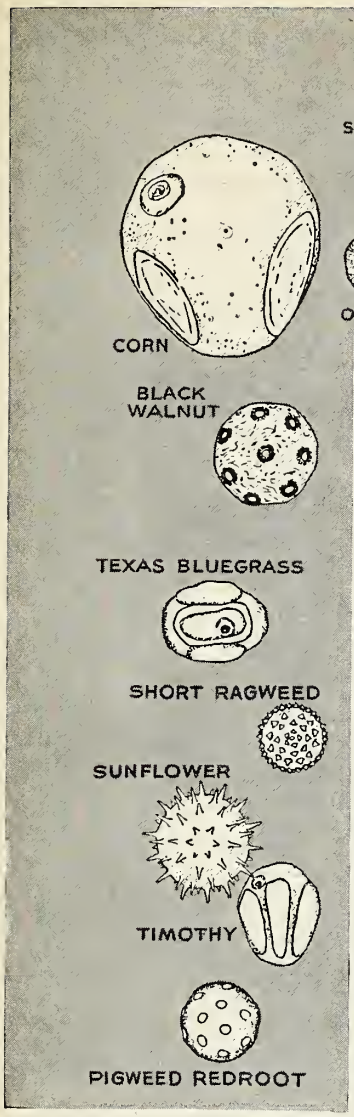


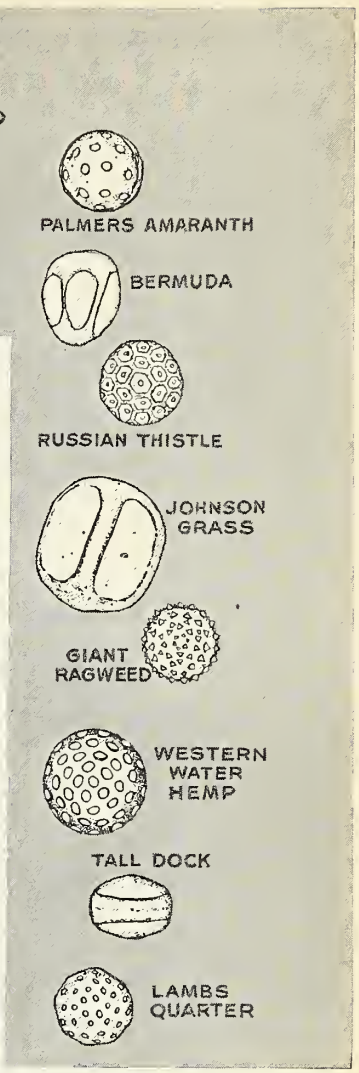
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A civic committee is attempting to raise $3,000 for the purchase of two "iron lungs".

Findlay—A gift from O. D. Donnell will result in the construction of a new wing on the local hospital.

Findlay—Three local physicians and their wives were recently honored at a dinner given by Dr. and Mrs. John V. Hartman at the Findlay Country Club. The honored guests were: Dr. and Mrs. J. H. Marshall, Dr. and Mrs. D. B. Biggs and Dr. and Mrs. E. E. Rakestraw The physicians recently returned from a six-weeks' trip abroad.

Ironton—Dr. V. V. Smith was the speaker at a recent meeting of the Lions Club.

New Philadelphia—Dr. R. J. Foster has been elected president of a permanent organization to have charge of a joint fund, raised by the local Civic Club and the Federated Women's Clubs of Dover, to provide serum for use in the treatment of pneumonia.

Salem—"Medicine as a Profession" was the title of a talk recently made by Dr. Guy E. Byers before a group of Senior High School boys, as part of a vocational guidance series sponsored by the local Rotary and Kiwanis clubs.

Toledo—Dr. Cornelius J. Paule has been appointed superintendent of the bureau of communicable diseases.

Toledo—Dr. James I. Collins, with a card of 81, recently won the 1938 golf championship of the Toledo Academy of Medicine at Sylvania Country Club.

Wadsworth—Dr. Harold J. Gordon, Akron, spoke on "Venereal Diseases" at a recent meeting of the Rotary Club.

Warren—A campaign is being conducted to raise $225,000 for the St. Joseph's Hospital building fund.

Wellston—Dr. H. W. Gillen has been appointed a member of the local Board of Education, to fill the vacancy made by the death of Dr. J. A. Harper.

West Alexandria—Dr. J. B. Lucas was severely injured in an automobile accident recently.

West Union—Dr. Otto K. Engelke, Adams County health commissioner, recently completed a course in public health at the University of Michigan.

Wooster—Dr. Edward W. Douglas spoke on "Sulfanilamide" at a recent meeting of the Rotary Club.

Yorkshire—Dr. and Mrs. E. A. Fisher celebrated their 50th wedding anniversary recently.

Zanesville—Officers of the staff of Bethesda Hospital are: Dr. E. R. Brush, president; Dr. G. B. Trout, vice president, and Dr. P. H. Elliott, secretary and treasurer.

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Vol. 34 SEPTEMBER, 1938 No. 9

THE CLINICAL USE OF SULPHANILAMIDE AND ITS DERIVATIVES WITH SPECIAL REFERENCE TO THEIR POSSIBLE TOXIC EFFECTS

By PERRIN H. LONG, M.D., BALTIMORE, MARYLAND

THERE can be but little doubt concerning the effectiveness of sulphanilamide in the treatment of Beta hemolytic streptococcal infections[1]. Clinical reports[2, 6] indicate that this chemotherapeutic agent is also of value in the treatment of meningococcal, gonococcal, Welch bacillary, melitensis and certain urinary tract infections due to staphylococci, E. Coli, B. aerogenes, B. pyocyaneus, group B. Beta hemolytic streptococci, and B. proteus. In our experience, the drug has been of little value in the treatment of pneumococcal lobar pneumonia but has shown some effect in the therapy of Group IV pneumococcal meningitis. We have used "prontosil solution" only in Beta hemolytic streptococcal infection and have found it to have a definite therapeutic effect in this type of infection.

In the treatment of infections susceptible to the chemotherapeutic effect of sulphanilamide, certain definite rules may be laid down concerning the management of the therapy. Our experience leads us to believe that in severe infections caused by the Beta hemolytic streptococcus such as meningitis, peritonitis or septicemia, in any type of meningococcal or Welch bacillary infection, in gonococcal endocarditis and in pneumococcal meningitis it is highly important to obtain as quickly as possible, and then to maintan, a concentration of from 10 to 20 mgms. per cent of free sulphanilamide in the blood.

If the patient is not vomiting it is probably safe to rely upon oral therapy with sulphanilamide but otherwise parenteral therapy with sulphanilamide or "prontosil solution" (if the infection is streptococcal in nature) should be instituted and continued until the disease is under control. In adults weighing about 150 pounds and suffering from a severe infection which is susceptible to sulphanilamide therapy, the administration of an initial dose of 4.8 grams (80 grains) by mouth of sulphanilamide will generally produce a blood level of from 8 to 11 mgms. per cent of free sulphanilamide within four hours. (This initial dose is roughly equivalent to 0.07 grams per kilogram or 0.6 grains per pound of body weight). The initial dose should be followed at four hourly intervals in adults by 1.2 (20 grains) of sulphanilamide. It is highly im-

The Author

Dr. Long is a graduate of the University of Michigan Medical School, 1924; member American Society for Clinical Investigation; Harvey Society; Society of American Bacteriologists; associate physician, The Johns Hopkins Hospital; associate professor of Medicine, The Johns Hopkins University, Baltimore.

Read before the Third General Session, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

From the Department of Medicine, The Johns Hopkins University, Baltimore, Maryland.

*This investigation has been supported by a grant from the Chemical Foundation, Incorporated, of New York City.

portant to maintain an even and regular schedule of therapy in order that an adequate blood level of sulphanilamide may be maintained.

However, if the patient is comatose or vomiting, sulphanilamide should be given by the parenteral route. It is best to prepare a 1 per cent solution of crystalline sulphanilamide in one-sixth molar sterile sodium lactate or Hartmann's solution. If these solvents are not available sterile physiological saline solution may be used. The solution may be sterilized by boiling for three minutes or by autoclaving for five minutes at 15 pounds pressure. It is then cooled to 37°c. and is given by hypodermoclysis in appropriate amounts. An adult weighing 150 pounds should receive an initial dose of 6 grams of suphanilamide (600 cc of a 1 per cent solution) when the drug is given by the parenteral route. Then at eight hourly intervals 2 to 4 grams (200 cc to 400 cc) of a 1 per cent solution should be given. When sulphanilamide is given by the parenteral route there is a more marked variation in the blood levels of the drug as determined by various intervals of time and because of this we feel that as soon as it is practical that the oral administration of sulphanilamide should be commenced.

If for one reason or the other it does not seem possible to administer sulphanilamide by the parenteral route, then in streptococcal infections, "prontosil solution" is the drug of choice. In an adult weighing 150 pounds 20 cc. of "prontosil solution" should be administered by the subcutaneous route every four hours until the infection is under control.

Sulphanilamide and "prontosil solution" are excreted almost entirely by the kidneys. Therefore, in severe infections it is best not to force fluids too strenuously because this procedure will result in a too rapid excretion of the chemotherapeutic agents and proper blood levels will not be obtained. In adults fluids should be limited and forced to 3500 cc. a day. This in our experience has proved ample for the needs of the adult patient and has not interfered with the attainment of an effectual blood level of sulphanilamide. When sulphanilamide is given to a patient it brings about an increased excretion of sodium and potassium in the urine, a fall in the CO_2, combining power, and in certain individuals, a clinical acidosis will result. To avoid this toxic manifestation of the drug we routinely administer half as much bicarbonate of soda as we do sulphanilamide with each per oral dose of sulphanilamide. If the drug is being given in physiological saline solution by the parenteral route, bicarbonate of soda should be given by mouth.

In patients suffering from infection of the meninges, a 1 per cent solution of sulphanilamide in one-sixth molar lactate or physiological saline solution may be given by the intrathecal route. Always, less sulphanilamide solution should be given, than the amount of spinal fluid removed and it should always be given by the gravity flow method. It has not as yet been decided whether it is always necessary to give sulphanilamide by the intrathecal route in infection of the meninges. It is well known that sulphanilamide passes over into the spinal fluid at slightly lower levels of the drug than exist in the blood at any given time and many patients ill with meningeal infections have recovered after treatment with sulphanilamide by the oral route alone.

It is difficult to generalize upon the continuation of the treatment of the severely ill patient because each patient constitutes an individual problem. One must be guided in this respect by the clinical course of the disease. Experience has shown that it is best not to discontinue intensive treatment until the disease is completely under control. Then the amount of sulphanilamide may be slowly decreased day by day, until the time comes for the patient to be up and about. At this period it is probably safe to discontinue the sulphanilamide altogether.

In mild or moderately severe streptococcal infections such as otitis media, erysipelas, tonsillitis, scarlet fever and sinusitis, the system of therapy that has just been outlined is unnecessary and blood levels of sulphanilamide of from 4 to 7 mgms. per cent seem to be effective. These levels can be obtained in the adult weighing 150 pounds by administering a total of 5.4 grams (90 grains) of the drug per day in six divided doses at four hourly intervals. This amounts roughly to about 0.09 grams of sulphanilamide per kilogram of body weight. Adequate amounts of bicarbonate of soda should be given as outlined above. In these types of infections the amount of sulphanilamide prescribed should be decreased as soon as a definite clinical improvement has been noted. Here again the continuation of the treatment is entirely dependent upon the clinical response of the individual patient. There are, however, certain types of infections in this group, namely those of bone, such as streptococcal osteomyelitis, otitis media and mastoiditis in which it is well not to discontinue sulphanilamide altogether until a week after a complete clinical cure has been noted. If this precaution is carried out, recurrences of infection will be reduced to a minimum.

Regardless of the type of illness under consideration, we believe that it is always advantageous to the patient if he can be put to bed while receiving sulphanilamide. It makes treatment an easier problem because the minor toxic manifestations will be reduced to a minimum if the patient is quiet.

Saline laxatives and cathartics should not be

administered while a patient is receiving sulphanilamide as there is some evidence that these drugs facilitate the formation of sulphemoglobin. Other "coal tar derivatives", such as, acetosalicylic acid and phenobarbital, iron derivatives, digitalis and even the arsphenamines can be given to the patient who is receiving sulphanilamide. In the patient, who has renal damage, with poor kidney function, sulphanilamide should be administered with care because the drug will not be excreted in a normal fashion and will accumulate in the tissues.

There is no unanimity of opinion as to what constitutes the best procedure to employ in the treatment of acute or subacute gonococcal infections. Our own observations lead us to believe that in adults, large doses of sulphanilamide are indicated during the first four or five days of therapy. Then the drug may be slowly decreased over a period of ten days. In the male, if a cure is not effected in that time it is highly unlikely that the therapy will be successful if continued for a longer period. In the female, a month's course of treatment seems to give fairly satisfactory results. There is no reason why local treatment should not be combined with the sulphanilamide therapy. When possible the treatment of gonorrhea should be controlled with bacteriological cultures and the sole criterion of cure should be repeatedly negative cultures taken at suitable intervals.

It is our belief that sulphanilamide should be used in urinary tract infections only after conservative methods of treatment have failed. We view with alarm the widespread and uncontrolled use of this drug in the treatment of mild urinary tract infections. However, if sulphanilamide is the drug of choice it should be remembered that adequate concentrations of free sulphanilamide must be established in the urine. About one-half of ingested sulphanilamide is excreted in a conjugated form (acetyl sulphanilamide) which is inactive. This fact must be taken into account in determining the amount of sulphanilamide needed to sterilize the urinary tract.

In general, a concentration of 50 mgms. per cent of free sulphanilamide in the urine is satisfactory in staphylococcus albus infections, 100 mgms. per cent in staphylococcus aureus infection, 200 to 250 mgms. per cent in E. Coli and group B. hemolytic streptococcal infections, 250 to 300 mgms. per cent in B. aerogenes and B. pyocyaneus infections and from 300 to 350 mgms. per cent of free sulphanilamide is required in B. proteus infection. These concentrations should be maintained for at least five days. In practice in adults we limit liquids until the urine output is around 1000 cc. Then knowing that roughly half of the sulphanilamide will be excreted in the inactive form, we estimate our dosage as follows. One gram of sulphanilamide per day will, after a balance has been reached (this takes three days of therapy) give a concentration of 100 mgms. per cent in the urine, of which half will be free and half conjugated. If higher concentrations of the drug are needed the estimated doses can be calculated from this example. Adequate amounts of bicarbonate of soda should always be given. The only evidences of cure should be the sterility of the urine upon bacteriological examination.

It is obvious that for the proper use of any therapeutic compound a knowledge of its possible harmful effects is necessary. This is espeically true in regard to therapy with sulphanilamide because this chemotherapeutic agent, while possessing a low degree of acute toxicity for both man and animals[7, 8, 9], is capable of producing a wide variety of undesirable side effects in human beings.

It will be our purpose in this communication to discuss the toxic manifestations which have occurred in the course of sulphanilamide therapy of 335 patients in the wards of the Johns Hopkins Hospital, together with certain observations upon the recognition and control of these toxic manifestations.

In our original report[7], we noted the occurrence of certain cerebral toxic effects in mice and in human beings. These are among the most common toxic effects and consist of dizziness, headache, a loss of the ability to concentrate, a loss of normal reaction time, anorexia, nausea and, in some instances, vomiting. These manifestations by themselves have rarely been severe enough to warrant discontinuing the drug in ward patients but symptoms in this group frequently are very annoying to the ambulatory patient and may be severe enough to necessitate stopping the drug. It is interesting to note at this point that the sulphanilamide and alcohol tend to complement each other in their toxic effects and because of this the use of alcohol should be discouraged in patients receiving sulphanilamide. The decreased mental acuity and dizziness which sometimes occur in the course of sulphanilamide therapy may render the ambulatory patient dangerous in so far as driving a motor vehicle is concerned. Professional motor vehicle drivers should be warned in this respect. Because of the frequency of these cerebral effects we feel that whenever it is practical the patient who is receiving sulphanilamide should be kept in bed—at least during the first days of treatment.

Cyanosis of varying degrees is almost a constant finding in patients treated with sulphanilamide. The mechanism of the production of the cyanosis is still in dispute. Marshall[10], does not believe that the formation of methemoglobin is always responsible for the cyanosis while Wendell[11], has stated that varying degrees of methemoglobinemia have been found in 200 patients

treated with sulphanilamide. Despite certain dissident foreign observations[12, 13, 14], the cyanosis does not seem to be due to sulphemoglobinemia. We have noted intense cyanosis appearing within four hours after the ingestion of 1.5 grams of sulphanilamide and on the contrary we have noted patients in whom large doses (3.6 to 7.2 grams per diem) of sulphanilamide produced but mild degrees of cyanosis. We do not believe that the development of cyanosis by itself constitutes a dangerous toxic manifestation in the course of sulphanilamide therapy nor do we believe that cyanosis is a contraindication to further treatment.

Clinical acidosis as evidenced by the combination of hypernea and a lowered CO_2 combining power has been noted in 3 per cent of the 335 patients who comprise this study. As we have previously stated[15], the acidosis is accompanied by loss of sodium and potassium in the urine. Since we have adopted the routine procedure of prescribing bicarbonate of soda with each dose of sulphanilamide, we have not noted this toxic manifestation.

Jaundice (without anemia) and accompanied by a marked decrease in liver function has occurred but once in this series of patients. The jaundice rapidly disappeared and the liver function returned to normal soon after sulphanilamide therapy was discontinued. We do not believe that the previous existence of liver damage or jaundice is necessarily a contraindication to sulphanilamide therapy. This is especially true if the existing liver damage is the result of an infection in which therapy with sulphanilamide is indicated.

We have not noted any evidence of renal damage or irritation which could be remotely attributed to sulphanilamide. It is to be remembered in this connection, that the damaged kidney does not excrete sulphanilamide easily and care should be taken that sulphanilamide does not accumulate in the blood stream in patients with impaired renal function.

Dermatitis has been relatively uncommon in this series of patients with but 1 per cent of the group showing this type of toxic reaction. This figure is lower than that observed by Hageman and Blake[16] and Schwentker[17]. In our experience the rash has always been of "measly" type. All have been accompanied by some degree of fever and all have cleared rapidly when the drug was discontinued. This procedure will do away with the possibility of a severe dermatitis of the exfoliative type developing. In one instance in which sulphanilamide was given again after the rash had disappeared, a mild dermatitis developed rather promptly. In but one instance has the dermatitis seemed to be associated with a photosensitivity of the skin.

Simple fever has been the most common toxic reaction (6 per cent) noted in this series of patients. Frequently the question is asked as to how one differentiates the fever due to sulphanilamide from fever due to the infection. It is interesting to note in this respect that in but one instance has this question had to be decided in the 22 patients in our series who developed fever as a toxic manifestation of sulphanilamide therapy. All of the other patients had had one or more days of normal temperature before they developed the drug fever.

The time of the occurrence of the fever is of interest. Two patients developed fever on the first day of therapy with sulphanilamide, four on the third day, one on the fourth day, two on the fifth day, two on the sixth day, four on the seventh day, two on the eighth day and five on from the ninth to fourteenth days of treatment. Thus it is evident that fever may occur at any period in the course of sulphanilamide therapy.

In addition to simple fever due to sulphanilamide we have noted that in almost all instances the patients developing a dermititis, an acidosis, an acute hemolytic anemia or an agranulocytosis also show an early febrile response. Because of this we have come to the conclusion that the appearance of fever constitutes an important warning sign in the control of patients being treated with sulphanilamide and that sulphanilamide should be promptly discontinued in patients who develop an unexplained fever.

Inasmuch as simple fever is a fairly common toxic manifestation in the course of sulphanilamide therapy, the question whether it is dangerous to resume treatment with the drug after the fever has disappeared is of importance. Our observations lead us to believe that it is impossible to predict whether a given patient will develop another febrile reaction if sulphanilamide therapy is resumed. However, because of the intensity and sharpness of the febrile reactions which have followed the restoration of sulphanilamide therapy in certain patients we believe that it is wise to administer a test dose of 0.3 grams of the drug to patients who have previously had a febrile response to sulphanilamide. Then if no febrile reaction occurs within 12 hours it has seemed safe to continue with the drug. If, on the other hand, a sharp febrile response is noted it is unwise to attempt further sulphanilamide therapy.

Anemias of the hemolytic type have occurred quite commonly in this series of patients. Fortunately, most of the anemias were mild in type and slow in developing. A drop in hemoglobin of from 10 to 20 per cent is a common finding in the course of sulphanilamide therapy, especially if the treatment is prolonged over a period of 10 days or more. These slowly developing anemias are not accompanied by bilirubinemia, although increases in the reticulocyte

count above normal limits is the rule after the hemoglobin begins to drop. Urobilin is almost constantly present. Our observations lead us to believe that these slowly developing mild anemias are not a contraindication to the continuation of sulphanilamide therapy.

Acute hemolytic anemias[18, 19] characterized by a rapid fall in the red blood cell count and the hemoglobin, a moderate to a marked leukocytosis, marked reticulocytosis, bilirubinemia, urobilinuria and in certain instances porphyrinuria have occurred in 3 per cent of the patients included in this series of observations. This type of toxic manifestation is one of the most serious encountered in the course of sulphanilamide therapy. These anemias have generally been severe enough to necessitate one or more transfusions. They occur within 24 to 72 hours after treatment has begun. The maximal anemia generally develops within three days after the hemolytic process is irritated. All of these patients show a definite rise in temperature during the anemia phase. This toxic manifestation is more common in children than in adults. In one instance in which therapy with sulphanilamide was resumed the hemolytic process recurred.

The mechanism of this type of anemia is not as yet clearly understood but it would seem to be the result of an individual idiosyncrasy towards sulphanilamide. There is no evidence that any one type of infection predisposes an individual toward this form of anemia. Experience has shown that sulphanilamide should be discontinued if an acute hemolytic anemia develops.

Agranulocytosis has been reported in the course of sulphanilamide therapy[20, 21]. We have noted one patient suffering from a gonococcal arthritis and urethritis who developed this toxic manifestation toward the end of the third week of treatment. This patient showed the typical picture of agranulocytic angina. Treatment designed to rid the patient of sulphanilamide was immediately instituted and within 10 days the patient had made a complete recovery from this blood dyscrasia. The mechanism of the production of serious leukopenias and agranulocytosis by sulphanilamide is as yet unknown.

Sulphanilamide is excreted by the kidneys as has been shown by Marshall et al[22]. Therefore, when any type of toxic manifestations due to this drug occurs and it is desired to rid the organism of sulphanilamide as quickly as possible, large quantities of fluid should be given. The ensuing water diuresis will result in the rapid elimination of sulphanilamide from the blood and tissues.

SUMMARY AND CONCLUSIONS

Sulphanilamide is a powerful chemitherapeutic agent in the treatment of Beta hemolytic streptococcal infections. It seems to have a definite value in the treatment of meningococcal, gonococcal, Welch bacillary, melitensis and certain urinary tract infections. It should not be used unless there is definite clinical or bacteriological evidence that an infection susceptible to its therapeutic effect is present. In severe infections large amounts of sulphanilamide are indicated and in milder types of infections smaller amounts of the drug are effective.

This chemotherapeutic agent has many toxic side effects and because of this the patient should be under careful clinical and laboratory supervision while sulphanilamide is being administered. This supervision should consist of careful clinical observations of the patient, frequent and regular temperature recordings, a daily hemoglobin and a daily total white blood cell count. If these procedures are routinely adhered to, the various toxic manifestations will be noted in their inception and no great harm will come to the patient.

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THE HEARING PROBLEM: A CHALLENGE TO MEDICINE

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IT is not within my province to go into the complicated problem of medical economics but I do wish to point out that medicine is at a great crossroads—no matter which way we go it behooves us to pick up all the straggling ends. It is concerning one of these loose fringes that I intend to speak today.

The hearing problem presents a real challenge. Many people have interested themselves and others in this problem. These persons may be divided into four groups, as follows:

1. Lay organizations, best typified by The American Society for the Hard of Hearing.
2. Commercial firms which manufacture and sell hearing aids and audiometers.
3. The Federal and State governments.
4. The Medical Profession.

I propose to analyze what has been done to date by these groups and also point out how our group, the doctors, can do more and thereby effectively direct some of the misguided moves of the commercial firms and the governments. No one will disagree with the statement that partial or complete deafness is a pathological condition. This makes it a medical problem. In many instances, deafness can be prevented and ameliorated. This is our problem. An official of one of our county medical societies, in discussing this problem said, "The deaf are deaf and nothing can be done about it except rehabilitation which is a problem of whole society." The rehabilitation of those deafened is only part of the problem. Why should we shirk our responsibilities because of this flimsy excuse?

HARD OF HEARING SOCIETIES

The American Society for the Hard of Hearing was formed in 1919 by Dr. Wendell C. Phillips. Its nucleus was the nine existing independent organizations, the oldest is in New York City and dates from 1903. After unification, new groups were formed until now there are 166 societies in the United States and Canada. Although individual doctors have been and still are influential in this society, it is essentially a lay organization. A goodly number of the clients of this society have been self diagnosed. Most of their work has been rehabilitation and this society should be given the credit for the spreading of the knowledge of lip reading. Today the old sign language is nearly extinct. Now we find that rehabilitation is listed as their third objective—prevention of deafness and the conservation of hearing being their first two objectives. In order to attain these newer objectives in the most beneficial manner, there must be mutual cooperation between this society and the medical profession. In Ohio, there are societies in Cincinnati, Cleveland, Columbus, Dayton, Marion, Toledo, and Youngstown. I would urge you to make contacts with your nearest local society if you have any hearing problems in your practice.

HEARING AIDS AND AUDIOMETERS

The old speaking tube has been used as an aid for several centuries to those deafened and there have been innumerable types of quackery aids manufactured and sold in the past. However, it was not until the electrical hearing aid was invented and developed that there have been real commercial possibilities in this field. It is interesting to note that because of the deafness of his wife, Alexander Graham Bell began experimenting with electrical hearing aids and out of these first attempts grew the telephone of today.

As the radio has developed so have the electrical hearing aids and also a new type of instrument. In the early twenties, Bunch and Dean of Iowa introduced a new means of testing hearing, the audiometer. Up until that time the old standbys had been the tuning forks and spoken voice tests. This audiometer enabled one to make a graph of a patient's hearing using various pitches as the ordinate, and an intensity figure called decibell as the abscissa. This individual audiometer has been developed and some of the first objections eliminated until there are now five makes on the United States market. It is beyond the scope of this paper to discuss the technical points involved but I do wish to point out that all of the individual audiometers use essentially pure tones in testing one's hearing. Since conversational voice is the important thing in hearing and because one's voice is anything but a pure tone, I believe that we are still a long way from having the ideal electrical hearing evaluator. There has also been developed a group or

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phonographic audiometer. There is but one of these made and it is put on the market by the Western Electric Company. At present it is known as the Western Electric No. 4B Audiometer.

I would like to briefly describe the group audiometer and the methods of its use. It consists of a phonograph to which has been added telephonic apparatus so that the sounds produced can be transmitted simultaneously to the ears of as many as 40 persons. It uses a magnetic type of reproducer which picks up the vibrations originated by the record and transforms them into electrical vibrations. These in turn are conveyed to the single receiver head set, transformed into sound waves, and delivered to the ears of the persons being examined. After the operator has seen that the head sets are all adjusted to the same ear on all 40 of those being examined, she explains that they will hear several series of two digit numbers and that each person being examined is to write the numbers heard on a test sheet in the proper place. The record is then started and there are four series of numbers for each ear. The first two of each series are in a female voice and the last two in a male voice. As each series progresses, the numbers become more faint until they are barely audible to the normal ear. The head sets are then placed on the other ear, the record turned over, and the process repeated. The operator grades the papers according to a master or key sheet.

In each of the above mentioned series, there are 12 numbers graded from the most intense downwards in steps of three decibells. It starts with a loss of 30 decibells and goes down through a zero loss to a minus three loss. This means that the first numbers are thirty decibells louder than the zero loss number which is the lowest audibility for an average normal ear. In other words, the first number is 1,000 times the intensity of the zero number. In grading a test sheet, the first level going downwards at which all of the four numbers are wrong is taken as the decibell loss for that ear. A decibell loss of nine or more is considered impaired hearing in that ear.

The reason for my spending considerable time on the operation and use of this type of audiometer is that it is the apparatus that is being sold to thousands of school boards throughout the United States and Canada. The mistakes that can be made with this machine and the possibilities of misinterpretation will be pointed out when our results in Cleveland are mentioned later in the paper.

Therefore, we find the commercial firms have, of themselves and with no other motive than profit in a financial way, developed a group audiometer for the testing up to 40 persons at one time. At least five makes of audiometer for individual testing are now available and there are known to me 12 different types of electrical hearing aids. These firms have developed a new type of technician called the audiometrist. After training these persons, they establish them in a center and give them an agency. They become in fact a sales manager for that area. Lobbyists for these firms are now working on many state legislatures, including our own, in order to get these audiometrists licensed to carry on this work. This brings us to our third group of interested persons—the federal and state governments.

GOVERNMENTAL ACTIVITY

To date, the Federal government is associated with the hearing problem in two ways. These are by so-called hearing surveys—in most instances with W.P.A. funds—and in the standardization of audiometers by the Federal Bureau of Standards. Last summer there was a W.P.A. hearing survey made in Cleveland by a house to house canvass in which the questioner simply asked the head of the house how many of those under his care had ear trouble. As far as I know there was no medical supervision of this survey. The results obtained were about as useful as asking neurotic patients if they ever had anything wrong with themselves. In New York and California there were statewide hearing surveys made by the Federal government by the use of the group audiometer in the schools. This was under medical supervision and their statistics are valuable. All children in the third grades were examined. The average age was 8½ years and this was found to be about the youngest age group that could be tested in a satisfactory manner. The figures from these two tests are about the same, namely, a fraction over 5 per cent of all children at this age show a hearing loss of nine or more decibells in one or both ears. Gardner[1] in a private survey in Iowa finds that 5.8 per cent of the children in this age group have a hearing impairment.

Wells[2] in a similar survey in England finds that 6.2 per cent of the children in the same age group have a hearing defect. He goes on to estimate that 16.0 per cent of the population of England has some hearing defect. **I wish to point out that in none of these surveys has there been an individual examination of those thought to be defective.**

The other part played by the federal government in the hearing problem is the standardization of audiometers by the Bureau of Standards. This work is still in progress and in my mind it is one of the healthiest moves made so far in this entire problem. It must be added, however, that the credit for forcing the commercial firms to have their instruments standardized must go to the Council on Physical Therapy of The American Medical Association.

The part played by the state governments is

one of legislation. In Ohio, the only laws passed have had to do with the question of reimbursement of local Boards of Education for the teaching of those totally deafened. There are many other bills being proposed and behind each one can be seen the guiding finger of a lobbyist for one of the commercial firms.

MEDICAL PROGRESS

Now as to the part played by the medical profession. We hear it said that medicine has done nothing and these survey figures would seem to show that hearing impairment is on the increase; both of which points I disagree with and will attempt to disprove them. For the sake of clarity, hearing impairments should be divided into two classes; those having their inception from birth to the end of a person's educational period (21 years), and those having their inception after 21 years of age. The relative incidence of cases in these two age groups is approximately 50 per cent in each group. Accurate figures are not available. As to their relative importance, there is no question—because of the social and educational factors involved the early life group is by far the more important. I will speak of the later life deafness first and then of the earlier life deafness.

Later life deafness can be further divided into two groups; approximately 70 per cent being either otosclerosis or senile deafness. Of these two types, we will have to admit that to date nothing has been done to either prevent or ameliorate this class of hearing impairment. Of the remaining 30 per cent, we find that they consist mainly of catarrhal deafness with the occasional case of otitis media and eighth nerve tumor. These three types of deafness can be successfully treated and it behooves all of us to see that these cases are properly diagnosed and proper treatment instituted as early as possible.

Early life hearing impairments may be divided into three groups, as follows: (1) those occurring before birth, (2) those occurring as a complication of a contagious disease, and (3) those due to otitis media of a non-specific origin.

Taylor[3] has pointed out that prenatal medication such as quinine, the salicylates, and alcohol may impair the hearing of the newborn child. With proper consideration of this fact by the medical profession, cases of deafness from this cause will be completely eliminated. I have recently analyzed the records of the cases that have been admitted during the last 36 years to The Alexander Graham Bell School in Cleveland. Of these 562 children, all of whom were essentially totally deaf, 22.8 per cent gave a history of having had deaf mutism in either one or both of their parents' family history. By proper education of these congenital deaf along the lines of sex hygiene or as suggested by Shurly[4], the legal prohibiting of the congenitally deaf to intermarry, I can see the complete outbreeding of congenital deafness in generations to come.

Hearing impairments occurring as a complication of contagious diseases constitute a large majority of early life cases. The general practitioners and pediatricians working in conjunction with the public health officials are constantly reducing the incidence of these cases. However, further reduction can be accomplished as I shall point out. Twenty-five years ago, diphtheria, typhoid fever, infantile paralysis, and epidemic spinal meningitis contributed to a large share of our hearing cases. Today these diseases are rare. No one but the medical profession can claim credit for this fact.

Scarlet fever, measles, and mumps are still with us although the severity of these cases is definitely less and as a consequence ear complications are less frequent. It is possible, I believe, to further reduce the frequency of hearing impairments in these cases by checking both the condition of the ear drums and the hearing during the convalescence stage. It has been my privilege to see several cases of hearing impairment during the convalescence from measles, which impairment was practically eliminated by prolonging the bed rest and forcing fluids on these patients. One can properly ask how can the general practitioner examine these patients as to their hearing. The audiometer is out of the question and the so-called watch tick test is useless. The spoken voice test is of great value providing that one ear is tested at a time. Testing one ear at a time can only be accomplished by using a Barany noise apparatus in the ear not being tested. This instrument is both cheap and very easily manipulated. It is most important to remember that a person can lose up to approximately 40 per cent of hearing in one ear without being cognizant of the fact and unless the doctor examining the ear tests only one at a time this loss may be missed by him.

The third group of early life hearing impairments are from non-specific otitis media. The incidence of these cases is probably the same as it was 25 years ago. I wish to go on record as saying that this incidence can be reduced by at least 80 per cent if the medical profession will consider two facts; namely,

1. Practically all cases of non-specific otitis media are caused by the patients themselves forcing virulent bacteria into the middle ear.

2. Most of the hearing impairment occurs after the active infection has stopped.

How does a person force bacteria into the middle ear? These bacteria must be either in the nasopharynx of the posterior nares and there may or may not be an inflammation of these parts. The mucous membrane of the middle ear is vulnerable to these bacteria even though there

may be enough local immunity in the nose or nasopharynx to combat their onslaught. A sudden increase of air pressure in this area is the thing that forces the bacteria into the middle ear. This is caused by blowing one's nose or by swimming—particularly diving. Both of these procedures should be stopped, particularly when the bacteria are virulent enough to cause an inflammation of the nose—as in a common head cold. The most frequent question asked me is how does one clear the nose if not by blowing. The answer is simple—by drawing it back into the nasopharynx and then expectorating. This is a negative pressure and bacteria can not be forced into the middle ear. There is no other group of persons better fitted to get this idea across to the public than the medical profession. When the day comes that we see all our children properly educated to this fact, the incidence of non-specific otitis media will be reduced by four-fifths.

The second point is that permanent impairment of hearing caused by an acute attack of otitis media occurs from three to six weeks after the discharge has stopped. This is due to the formation of adhesions around the three ossicles in the middle ear. How do we prevent these adhesions—by active massage of these parts through both the eustachian tube and the external ear canal. A patient having had an actively discharging middle ear should not be released from medical care until at least two months after the discharge has stopped and the hearing in that ear is essentially the same as it was before the disease started.

HEARING SURVEYS IN CLEVELAND

For the past eight years, the children in the Cleveland Public Schools have been tested by the group audiometer. No more than one audiometrist worked during a given year and in each case she was a registered teacher. The work was done during school time, in other words, 180 days a year. Accurate statistics are only available for the past five years. She would test all third grade pupils and then all known cases of potential hearing impairment. In the latter group, there would be included such cases as failures and children in whom the teachers questioned their hearing acuity. After grading the test papers, all children showing a hearing loss of nine or more decibells in one or both ears would be retested. If, after being retested, a child still showed a similar hearing loss his or her name would be put on a so-called ear list and when the school otologist visited that school, he would see all these children.

A total of 85,680 audiometer examinations have been done during the four school years previous to this year. Of this number, 47,576 examinations were done on third grade pupils; in other words, children with an unknown ear history: 2,370 of these new cases still showed an apparent hearing loss after having been rechecked. This amounts to a percentage of 4.98 which is approximately the same as the figures obtained in the other surveys mentioned earlier.

During the present school year, I have examined the hearing of those children who had an apparent hearing loss as shown by the group audiometer. This was done in addition to an examination of their ears, nose, and throat. After examining about 100 third grade pupils who had a normal group audiometric test, I concluded that 30 feet could be considered normal hearing in one ear with a Barany noise apparatus in the untested ear. This work had to be done in noisy school buildings. The average age of these children was 8½ years, and from two to five syllable words chosen from an approved list of vowel and consonant words were interspersed at irregular intervals in a series of two digit numbers.

So far this year, I have individually examined 402 third grade pupils who have had a hearing loss of nine or more decibells in one or both ears by a rechecked group audiometric examination. Of this number, 279 had normal hearing in both ears. In other words, 69 per cent of these children showed normal hearing when examined as individuals. Does this mean that the group audiometer is of no value? Absolutely not, but it does mean that the group audiometer is only a filtering machine and in no respect should it be considered as a diagnostic implement. However, I believe that it will function 100 per cent in detecting those that do have an actual hearing loss.

The explanation as to why 69 per cent of these children failed in two audiometric examinations but still have normal hearing lies in the fact that there is more to hearing than a normal functioning middle ear, inner ear, and eighth cranial nerve. Many of these children had intelligence quotients from 10 to 25 per cent below normal. In this group, I found quite a few of the old fashioned "day dreamers." They did not choose to hear. I have discovered, so far this year, 19 cases of what may be called convenient deafness. These were children from eight to fourteen years of age who had very poor ratings on group audiometric examinations. Their parents, teachers, and classmates considered them as nearly deaf. There was no history of ear disease and the ear drums were normal. After several attempts, I was able to convince practically all of these children that they could hear as well as anyone else. The complete details of this study are to be presented in a later paper.

Doctor Horace Newhart of Minneapolis, Minnesota, should be given the credit for pioneering in the hard of hearing problem. He believes that all of this work should be controlled and supervised

by organized medicine. An effective means of accomplishing this object would be to have every county medical society in this state have its own Committee for the Prevention and Amelioration of Deafness. There should be a state committee responsible to this association whose duties would be to correlate the activities and give advice to the respective county committees. Hearing impairment is a medical problem and properly belongs in the hands of the medical profession. Let us not forget what has happened to the problem of impaired vision. In conclusion, I would like to quote from a recent statement of our most widely known citizen that has had actual experience along these lines. Helen Keller says, "Lack of hearing has always been a heavier handicap to me than blindness."

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Poliomyelitis

Recent small epidemics of acute anterior poliomyelitis in Minnesota appear to reveal an increasing incidence of cases with respiratory difficulty. The respirator devised by Drinker and McKhann has been found to be of great help to the patients with difficult breathing. However, all patients are not benefited to the same extent.

Proper selection of the patients is essential. This is especially important in epidemic periods when the number of Drinker respirators available is less than the demand. Our experience with a small number of cases has shown the respirator to be of unquestionable value in the treatment of those patients with high spinal involvement. The machine gives them the rest so essential for recovery.

The Drinker respirator is of little or no value in the care of patients whose respiratory difficulty is bulbar in origin. The machine may overpower the choking and cough reflexes and in some cases even cause forcible aspiration through the larynx of secretions from the throat.

The bulbo-spinal cases may respond to the Drinker respirator provided the pharyngeal paralysis is unilateral. If the paralysis is bilateral and the patient cannot swallow, the machine is ineffective.—Albert V. Stoesser, M.D., and Wallace S. Sako, M.D., Minneapolis, Minn. Minn. Med., Vol. 21, No. 7, July, 1938.

Postural Drainage In Suppurative Lung Conditions

I have used gravity drainage with varying degrees of success in four main types of lung suppurations: (1) lung abscess, (2) bronchiectasis, (3) tuberculosis, and (4) empyema with bronchopleural fistula.

Success in this form of therapy requires free drainage from the lesion into a main bronchus and is greatly enhanced when the lesion is located in the lower two-thirds of the lung.

The technique consists in having the patient placed in a position that will permit drainage of the affected area by gravity. If the lesion is located at the base, the patient is instructed to hang over the edge of the bed for five minutes several times the first day, with the thorax as nearly perpendicular as possible. Each day the time is increased by several minutes, according to individual tolerance, until three or four hours daily are spent in the perpendicular position. After the patient becomes accustomed to the inverted position, the drainages may be consolidated into two, but not more than three, daily periods of from one to two hours each. If the last drainage is taken just before bedtime, it will not be necessary to elevate the foot or head of the bed for night drainage. In fact, I think any attempt to get drainage upon a sleeping patient is not only unnecessary, but dangerous, as infection may be carried to a sound lung. The patient should be trained to sleep, if possible, upon the back, abdomen, or the affected side. If the two main bronchi can be kept on the same horizontal plane, chances of infecting the contralateral lung will be greatly decreased. Adequately controlled drainage during the waking hours is sufficient.

For chronic lesions, such as bronchiectasis, the drainage bed or "trough" that can be raised and lowered mechanically is advisable, especially for children. There are many inexpensive beds and frames in use that can not only be raised and lowered, but tilted from side to side, facilitating drainage from any part of the lung. Several years ago Doctor Alex Forster kindly loaned me the blue prints of an inexpensive frame he had devised for postural drainage. I have had several of these frames made for the use of chronic suppurations. Recently a young woman visited me with her husband and two fine children, who as a young girl had spent a considerable part of three years on one of these frames draining her bronchiectasis cavities. She has been without symptoms for seven years.—Paul M. Holmes, M.D., F.A.C.P., Toledo, Ohio; Diseases of the Chest, Vol. IV, No. 8, August, 1938.

INDICATIONS FOR THE SURGICAL TREATMENT OF CHOLECYSTITIS AND CHOLELITHIASIS

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AS the years pass, one is more and more impressed with the difficulty of surveying his experience and reaching valid conclusions as to what is true and what is false. But difficult or not, we are forced to make decisions, and necessarily must have working hypotheses, temporary or inadequate though they may be. I propose to show what my experience seems to teach with regard to three points: (1) What is the natural history of untreated, i.e., unoperated, gallbladder disease? (2) What has surgery to offer in comparison? (3) What does it cost in operative mortality to secure these results and what factors lower this cost?

Besides the more impressionistic beliefs I have gradually acquired from clinical experience, and from study of the literature, my remarks will be more particularly based upon an analysis of a series of my own private cases at St. Luke's Hospital, a later review by Dr. James V. Seids of the combined experience of St. Luke's surgeons, and a study carried on for three years by Dr. R. E. S. Young, formerly of our staff at Lakeside Hospital, covering the years, 1925-35, embracing 1,000 consecutively operated cases and 451 cases treated medically. Dr. Young's paper is not yet published. I shall try to quote him sparingly and must publicly thank him for allowing me to use some of his statistics.

As you all know, the natural history of untreated (i.e., unoperated) cholecystitis and cholelithiasis includes chronic or recurrent dyspepsia, attacks of pain, which may recur again and again in almost unbearable bouts, serious injury of other organs, such as the liver and pancreas, and often death. The last I wish more particularly to discuss. The natural death rate of any disease is extraordinarily difficult to determine with accuracy. This is mainly because of the difficulty in securing a series of cases untreated, and left to their natural evolution. One has often to study a period soon after the discovery of a given disease, before methods of treatment are evolved, and then one runs into the factor of diagnostic error. I spent a long time once arriving at the doubtful conclusion that the mortality rate of untreated appendicitis is only 12 to 14 per cent.

To determine the natural death rate of gallbladder disease is particularly difficult, because it is extremely low in any one attack. So far as I can learn, it has never been done, but the only correct way would be to follow the methods of life insurance expectancy tables. Starting at 10 years of age with 100,000 people, death reduces this population at 35 years of age to 81,822 and 20 years later at 55, to 64,563 and we say a man has roughly four chances out of five to live these 20 years. I think you will all agree that a group of patients with gallbladder disease, at 35, left untreated until 55, would not have the four out of five chances of the life tables. What the precise ratio would be we do not know. Not to be misled by the low death rate of a given number of acute attacks, we must constantly remember that any one patient repeatedly re-enters the danger zone with each attack, and repeatedly throws his dice, which, even though loaded with a low mortality rate for any one attack, will likely cause him to lose in the end. The mortality rate in 327 unoperated cases diagnosed as acutely inflamed gallbladders, in the Lakeside series, was 1.5 per cent. The true figure would surely be higher, since a certain degree of selection must have been practiced in leaving these particular patients unoperated. I believe we must conclude that this 1.5 per cent would grow to a considerably higher figure if this particular group of patients were followed over the years. We can all readily agree that recurrence is frequent, but nowhere in the literature can I find creditable evidence for any particular percentage of recurrence. We simply do not know how many "one-attack" cases there are. Patients are ill-advised against operation because their physicians remember so many attacks of gallbladder colic for which they have been called to give relief, with so few deaths, and forget that by the laws of mathematics, a statistical population exposed to recurrent attacks, no matter how low the mortality rate per attack, would be wiped out in time, granted frequency of recurrence and time enough.

In comparison, what has surgery to offer those who survive the operation? Time permits only

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three brief statements. (1) There is only partial recovery where the operation has been so long delayed that serious damage has been done to the ducts, the pancreas, the liver, etc. (2) Only about two-thirds of the cases diagnosed largely by X-ray evidence, without much clinical confirmation, and especially cases without bouts of severe colic, are wholly relieved by operation. Graham and others have pointed out that while there is a close parallelism between X-ray findings and pathological change in the gallbladder, many of the symptoms of these patients are due to disease elsewhere, which removal of the gallbladder will not relieve. (3) The great majority of patients with stone colic are entirely relieved, provided irreparable complications are not present. Whipple, in a careful follow-up, found in stone cases 90 per cent completely relieved. In patients without stone the findings were 77.9 per cent. Of the Lakeside cases that were followed two to five years, there were persistent symptoms in only 6.7 per cent of the chronic cases without common duct stone.

What is the cost of these results in operative mortality? The rate varies with different operators, and means little. For example: Kehr, 16.2 per cent; Walton, 14 per cent; New York Hospital, 10 per cent; Young (Lakeside), 6.4 per cent; Mayo, 2.6 per cent. Hotz's 12,000 cases collected from various German surgeons gave an average of 9.29 per cent, with individual surgeons reporting all the way from 3.2 per cent to 27 per cent. These variations do not mainly depend on the skill of the operator. They are to be ascribed mostly to the age of the patient, the age of the disease, the frequency and type of complications present in various series, and the acuteness of the disease at the time of operation.

Hotz found a mortality rate of 3 per cent in patients between 21 and 25, and 27 per cent between 66 and 70. There was a sudden jump to 9.5 per cent between 46 and 50 years and to 20 per cent between 56 and 60 years. In a series of my own, studied a number of years ago, there were 9 deaths in 91 cases (10 per cent) but only one patient was under 50. Seids found the general experience at St. Luke's to be 22.2 per cent mortality in patients over 50 years and 5.4 per cent under 50 years. Young at Lakeside found between 31 and 40 years a percentage of 3.4 per cent contrasted with 11.5 per cent between 51 and 60 years. There can be no doubt as to the influence of age. Lucky the surgeon who gets the younger patients.

The fact that as men get older, they withstand operation less well, is true of many diseases. But the fact that the operative mortality (2.6 per cent) in uncomplicated cases is not much above that of appendicitis, whereas the average group age would be approximately double that of appendicitis cases, is evidence that other factors are at work. Seids found that the average duration of the disease in patients over 50 years is 4.25 years, and in patients under 50 years, 3.2 years, i.e., about a year's difference. Older patients have older disease, and it is reasonable to assume that the longer the disease persists, the more damage it does, and hence the greater chance of serious complications supervening. By way of parenthesis, I should like to state that for the practical purpose of convincing patients that an operation is indicated, you will be more successful if you point out the steeply rising mortality rate which accompanies increasing age, beginning, say around 45. The patient with a history of five or ten years of frequent attacks, without serious complications, is likely to want to float along awhile. But the very next attack may get him into serious trouble. As a matter of pure chance the more attacks recovered from, the more likely the next is to be fatal. If you threw pennies and got heads ten times straight, you would not bet much on throwing the eleventh head, next.

The influence of complications is easily shown. Kehr had a mortality rate of 16.7 per cent in a series of cases, 46 per cent of which had severe complications. Mayo, in a certain early series, had only 4.3 per cent mortality, but complications were present at operation in only 10 per cent of the cases. Kehr had a mortality rate of 3.2 per cent in a series without complications, but including common duct stone. Mayo later gives 2.9 per cent in uncomplicated cases and excluding common duct stone cases. Finally, Judd exhibits 1.2 per cent by excluding complicated cases, common duct stone cases and including many so-called strawberry gallbladders.

In a later personal series with 10 deaths in 102 operations, one was a bad heart case and died of heart failure; one was wrongly diagnosed, carcinoma of the hepatic flexure of the colon was found; one was a carcinoma of the common bile duct; four had common duct stones; one was suppurative pylephlebitis, wrongly diagnosed as cholangitis; one had severe cholaemia; and one had severe jaundice with hemorrhage. Not a single death occurred in an uncomplicated case.

Young in the 1,000 Lakeside cases showed a general mortality rate of 6.4 per cent. In 102 cases with common duct stone it was 17.6 per cent. In acute cholecystitis with common duct stone it was 36 per cent in 11 cases.

Operation in the acute stage increases the mortality rate. Seids found a mortality rate of 20 per cent for cholecystectomy in acute cases of all kinds. At Lakeside, in 253 cases operated in the acute stage, excluding common duct stones, the mortality rate was 10 per cent. It was only 2.6 per cent in 610 cases operated in the quiescent stage and only 1.5 per cent in 327 cases not operated, or operated later, after the acute phase

was over. Of the five that died without operation, two came to autopsy, where it was found that one had suppurative cholangitis without common duct stone, and one had acute cholangitis with hepatitis and early biliary cirrhosis. Of the other three, one had remote coronary disease with infarction and died of pneumonia. The diagnosis of gall bladder disease may well have been an error. One died of diabetes and pneumonia. One died with a greatly enlarged liver and severe jaundice. It is only fair to say that this low rate is partly a measure of judgment of the operators. None of the five deaths could probably have been prevented by operating in the acute phase.

Some men have drawn an analogy with appendicitis where perforation is frequent, early and deadly, and argue for the routine operation of all acute gall bladder disease. In my own practice I have never had a free perforation with general peritonitis. I intimately know by consultation of only three such cases. I here exclude sub-acute perforation with abscess formation. As we have seen, in the 327 conservatively handled Lakeside cases, there was no death from perforation. Of 253 cases operated in the acute state, there were three listed as showing free perforation. A careful reading of these histories shows that one, aged 30, may have been perforated by the surgeon in separating adhesions. This case recovered. Another case occurred in an old lady of 76, who recovered. She was operated on the third day of her illness, after a sudden exacerbation of pain. The rupture was actually seen. The third patient, aged 59, was fat, icteric and sick three days when admitted. On the second hospital day there was sudden exacerbation of pain, rise of temperature to 40°, with an extremely tender and spastic abdomen. Under local anesthesia the abdomen was opened and a large amount of bile escaped. It did not appear to be purulent, nor did the peritoneum appear inflamed. The gallbladder could not be carefully examined, but no rupture was seen. Free perforation, it is fair to conclude, is rare. The analogy with appendicitis is false.

In six or eight cases, depending on the criteria demanded as proof, there was subacute perforation, i.e., a walled off abscess, either communicating with the gallbladder or proved to have previously communicated with the gallbladder by the presence of stones in the abscess. There were six cases of gangrene. In view of these findings it is most deplorable that the urgency to anticipate possible perforation by early operation has grown to the point where men rush patients to the hospital and routinely operate as an emergency case of common gall stone colic.

By and large then, in acute cases of gallbladder disease we should pursue a course of watchful waiting, and only operate occasionally, as cautious judgment dictates; either because we are certain of the presence of some complication demanding immediate operation, or because the patient's condition as a whole seems to be getting worse rather than better. A mixed group of visiting and house surgeons at Lakeside have demonstrated that selection can be practiced without undue hazard.

We should not be unduly deviated from this plan of procedure by the fact that there is a form of acute, highly malignant streptococcus infection, with a very high mortality rate, whether operated or not. Fortunately these cases are comparatively rare. They should be excluded in any argument for the advisability of routine operating in the acute stage.

In conclusion then, we may say that gallbladder disease associated with pathological change of a magnitude easily demonstrated, and especially if associated with stone, and renal colic, is a dangerous disease to leave permanently unoperated.

Real gallbladder disease, as above described, is cured by operation in nearly all cases, provided serious complications are not present.

The cost in mortality rate is low provided that:

(1) The patient is not too old; and the disease not too old.

(2) Serious complications have not arisen.

(3) The operation is done in the interval.

The mortality rate under these conditions is so low as to be comparable with that of operation for acute, uncomplicated appendicitis.

DISCUSSION

Carl R. Steinke, M.D., Akron: Dr. Lenhart has given us a very able presentation of the subject and I agree with everything he has said. Dr. Lenhart did not mention the type of incision he uses. In the definite cases of gallbladder disease the right sub-costal incision seems preferable for the following reasons:

1. It gives very splendid exposure, particularly when you wish to inspect or operate on the ducts.
2. The wound heals well as a rule.
3. The patient seems to suffer less pain and therefore, there is less limitation of respiratory movements.
4. Much less danger of post-operative hernia.

In those cases where the X-ray diagnosis is "non-functioning gallbladder", without definite clinical symptoms of gallbladder disease, we should be cautious about operating because the post-operative results frequently are not satisfactory and the patient continues to have the same symptoms. This seems to be particularly true when there are no stones present.

Comparing acute appendicitis with acute cholecystitis as to the possibilities of complications, I do not think they are parallel, because in appendicitis you most always have the colon bacillus and other organisms to cause infection complications, while in acute cholecystitis the condition may be due to mechanical factors, such

as obstructive stone in the cystic duct, adhesions, or interference with the circulation, and not due to infection.

Dr. Lenhart has shown that the mortality is more frequently due to complications than to the operation on the gallbladder, itself. This is particularly true in acute gallbladder conditions, as shown by a study I have made. This consisted of a review of 762 gallbladder cases at the Akron City Hospital, of which 161 or 21 per cent were treated medically; there were 401 or 53 per cent of the cases operated and diagnosed chronic cholecystitis, and 200 or 26 per cent operated and diagnosed acute cholecystitis, which were proved both clinical and by the pathological study of the gallbladder. The mortality in these acute cases was 11.5 per cent (23 cases) of which seven died of peritonitis, five of myocarditis and three of nephritis with uremia. This corresponds very well with the reports of Miller, Whipple, Graham and Zinninger, whose combined mortality was 10.5 per cent for 647 cases. In their groups, together with mine, there were 200 cholecystostomies with a mortality of 19 per cent and 449 cholecystectomies with a mortality of 9 per cent.

In acute cholecystitis cases, I feel it is not best to wait more than 48 hours before operating, if the condition does not subside. Early operation keeps down the morbidity, mortality and complications as well as reducing the time in the hospital. By acute cholecystitis, is not meant gall stone colic, but those cases with an acute inflammatory condition of the gallbladder.

In the series of 200 cases studied, the temperature was under 100 degrees F. in 64 per cent and under 101 degrees F. in 78 per cent of the cases. Fifty-five per cent had a history of previous attacks of gallbladder colic.

The white blood count was not usually greatly elevated, averaging 12,700. When the white blood count got above 15,000, there was generally a condition of gangrene, empyema or perforation of the gallbladder.

A List of 23 Diseases

Which the Mouth Mucous Lesions of Early Syphilis may resemble—

Trauma from lip biting, simple pharyngitis, streptococcal angina, diphtheria, follicular tonsilitis, chronic tonsilitis, trauma (silver nitrate burns), leupoplakia, vincent's angina, aphthous stomatitis, geographical tongue, Fordyce's disease, erythema multiforme, pemph igus lichen planus, "split lip" tuberculosis, herpes labialis, neoplasm (tonsil), agranulocytic angina, mercurial stomatitis, bismuth stomatitis, periadenitis mucosa necrotica.

Examine the skin and genitalia. Do a serologic test.—Supplement No. 5, Venereal Disease Inf., U.S.P.H.S.

No man values the best medicine if administered by a physician whose person he hates or despises.—Jonathan Swift.

X-Ray In Sinusitis

Osmond in 1923 called attention to the possibilities of treating both acute and chronic infection of the antrum and frontal sinuses by X-ray. Since then several papers dealing with this subject have been published. The rationale of the treatment has been established by Butler and Woolley in 1934 which, in turn, was based on the production of experimental sinusitis in cats by Fenton and Larsell. They demonstrated that X radiation has no effect on the bacterial organisms, but acts solely upon their environment. The effect is primarily due to the destruction of the leucocytes in the infected membranes thereby making more quickly available the antibodies which are used to combat the infection as has been previously described. The effect of the irradiation first appears as the destruction of lymphocytes in the infected membranes occurring on the second or third day following treatment. There then follows an increase in the macrophages many of which were found to be loaded with debris and engulfed bacteria. The edematous membrane gradually decreases in thickness and, after a week, fibrosis begins to appear. Several weeks later, lymphocytes were found to have recurred in the membranes, indicating the return of lymphocyte formation. They found no evidence of injury to cilia, epithelium or cellular elements. The fibrosis they considered the result of the inflammatory process and not due to irradiation. Other experimenters have found that larger doses of irradiation than ever would be used in therapy produce no permanent injury to these tissues.

Rathbone states that X radiation is espeically indicated in subacute and chronic sinusitis in children. These are the cases in which the results from conventional otolaryngological methods are the least satisfactory and the results from X-ray treatment are the most successful. He reports a series of seventy cases in which the ages of the patients varied from three months to twelve years; fifty-eight of the patients were cured, twenty-eight improved, and fifteen not benefited. It is possible that many of the failures may be due to allergy, the X-ray appearance of which in the sinuses cannot be differentiated. Such cases, however, should be worked up clinically before being referred for X-ray treatment.

When we consider the part which sinus infection in children, too often unrecognized, plays as an etiological factor in many upper respiratory tract conditions, such as chronic cough, bronchitis, asthma, otitis media, etc., we should recognize the importance of this simple and apparently adequate method of obtaining relief.—Herman A. Osgood, M.D., Boston; Medical Record, Vol. 148, No. 2, July 20, 1938.

EARLY DIAGNOSIS AND CARE OF PREGNANCY

By H. E. McCLENAHAN, M.D., Youngstown, Ohio

ABOUT 54 years ago, my father went to see the family physician, and I suppose, told him that a new arrival was expected in the McClenahan family and the doctor's services would be needed in about a month. Then the doctor replied, "All right, when her pains begin, let me know."

We are all aware that wonderful changes in prenatal care have taken place in the last 25 years. Today some of the mothers-to-be come to us so early that it is impossible to tell by the ordinary physical examination whether they are pregnant or not. We will all agree that except in thin individuals with well-relaxed abdominal walls, it is hardly safe for the obstetrician to risk his reputation as a diagnostician under eight weeks. With stout or obese patients, it is often wiser to repeat the examination a month later, rather than to make an error.

Let the process of history taking—and the history should be carefully done—be also a preparatory process for physical examination; putting the patient at ease and giving her confidence. We want to know the present state of her health; also what diseases or operations she has had. We are especially interested in knowing if nephritis, cardiac disease, tuberculosis or diabetes are likely to become complications. One does not need to practice much obstetrics to realize that at least for some patients, it is absolutely necessary that they be given prenatal care if one is to avoid a catastrophe. Physical examinations held at women's colleges show that a large number of young women are below par physically.

The physician caring for a pregnant woman has a broader field to cover than does the practitioner of almost any other branch of medicine, for he must routinely watch for changes in her physical condition and in her mental and emotional status. He is even called upon to advise in regard to her marital relations, her clothing, exercise, diet and hygiene. At the first visit the physician should make a good general examination, including a careful pelvic examination. The facts obtained should be written into a permanent record sheet at once.

Time will not permit a detailed outline of the history. There is a small book entitled "Maternal Care" edited by Fred L. Adair, and published by the University of Chicago Press which gives a very complete outline. Suffice it to say that the more complete your record is, the more satisfactory it is on later consultation.

Read before the Fourth General Session, representing the Section on Obstetrics and Gynecology, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

The Author

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ATTITUDE

Many of the young prospective mothers will tell you they have not been to a doctor's office since they were children. With these, I think, the attitude of the physician is quite important. We must endeavor to put the patient at ease and to avoid all embarrassment if possible. At the same time, we must remember that she expects us to do our work well. We can protect her natural modesty by providing her with a kimono to wear, and draping her with a sheet. Gentleness in the examination will help inspire her confidence.

EXAMINATION

In making the examination it is well to have a definite system to follow. It seems easier to start at the top. Inspection will show if the patient is of normal development and appearance. Her weight and height should be taken. Significant dental defects should be corrected. Are there any signs of exophthalmos? The thyroid should be carefully palpated, especially if one lives in the goitre belt. If there is evidence of enlargement, small doses of iodine may be given once or twice weekly.

The heart and lungs are then studied. If pathology is found, further study is indicated with the aid of skiagraphy or the electro-cardiograph. The blood pressure is usually taken easier at the time the history is taken. The breasts and nipples are examined next and their character noted. In the examination of the abdomen, if the pregnancy is well advanced, one should try to determine whether the fetal presentation is normal. If it is in the breech or transverse position and the mother is a multipara, sometimes the position may be corrected before labor begins.

The external measurements of the pelvis normally should be about as follows—the interspinous diameters (about 26 cm.), the intercristals

(about 29 cm.), the bitrochanteric diameters (about 31 cm.), and the external conjugate of Baudelocque (about 20 cm.) Variations from these measurements give us an idea of the type of the pelvis. In many of the cases where the pelvic measurements are less than normal and still the mother delivers naturally, it will be found that the measurements conform to one another, and that the husband and wife are well-mated as to physical size. Internal mensuration is said to be a much better indicator for the true pelvic size. This method, however, because of the difficulty of doing it, is rarely done.

The extremities should be examined for varicose veins, deformities and rachitic signs. It is best to make the vaginal examinations at the time of this first examination to determine whether there is a pregnancy or not, and to learn the position of the uterus. Sometimes one is surprised to find a pelvic tumor also. Inspection of the cervix will show the presence of an erosion or sign of venereal disease. A routine smear is advisable. While making the pelvic examination it is easy to determine the contour or shape of the inner surface of the sacrum and the flexibility of the coccyx.

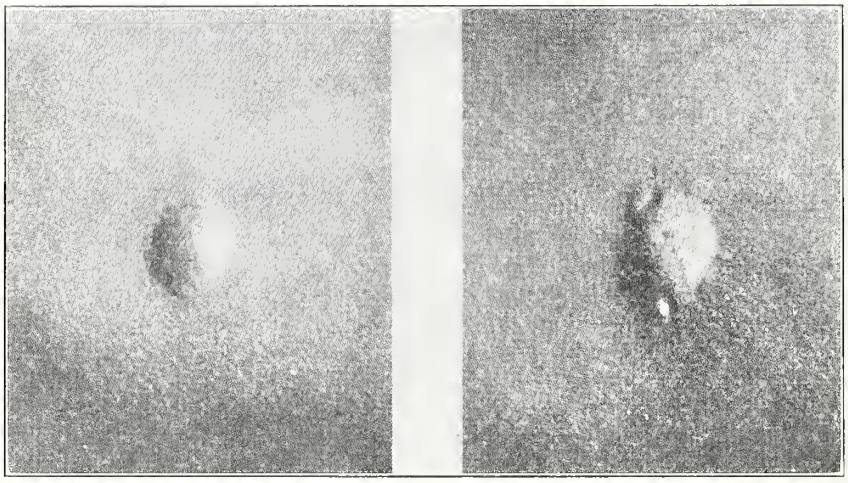
The blood examination can be done perhaps more conveniently at the second office visit. A red and white cell count and the hemoglobin should always be made. Since the United States Public Health Service has instituted the campaign against syphilis, it is noticeable how much more willing the women are to have the Wasserman test performed.

If the patient has failed to bring a urine specimen on this first visit, she should be instructed to be sure to bring one on each of the successive visits. By the time the physician has completed this first examination, he must, if possible, have made his diagnosis, therefore at this point we shall study the early diagnosis of pregnancy.

DIAGNOSIS

It is unnecessary to spend much time on what Williams[1] calls the presumptive and probable signs of pregnancy. All of these signs and symptoms are valuable in summing up our conclusions as to diagnosis; but one, of course, cannot make a diagnosis on any one of them.

There have been many attempts to develop tests for the early diagnosis of pregnancy. Most of them have been abandoned for one reason or another, but some are of great help. Your attention is called to the test which is used at



Negative Positive

Gruskin Intradermal Test.

Temple University. It was developed by Professor Benjamin Gruskin and put in practice by Professor J. A. Arnold, both of that school. It is called the Gruskin intradermal test. It probably will become known as the "skin test" for pregnancy, because it depends on the skin reaction to the injection intradermally of a placental antigen. Dr. Arnold[2] describes the Gruskin intradermal test as follows: "The test consists in injecting intradermally one-tenth of a cc. of a special placental tissue antigen with a 27 gauge needle and a 1 cc. tuberculin syringe. If positive, a pseudopod formation appears within eight to ten minutes. If negative, no such reaction is seen. A control of normal salt solution may be used with each test.

"This is a simple, quickly-acting, and remarkably reliable intradermal test that could be applied anywhere, anytime and without the aid of laboratory or technician. This test was found to be effective as early as two weeks, and as late as two trimesters. In the three years or more since this discovery, our experience (still quoting Dr. Arnold), and that of others permitted to use

the new test, has verified and confirmed its early promises of practicability and usefulness."

Dr. Gruskin's records of tests made in the obstetrical clinics of Temple University show:

"In 300 normal pregnancies, 96 per cent correct reactions—288 positives and 12 negatives. In 100 cases for differential diagnosis, 92 per cent correct results: 59 correct positives, including 8 ectopic pregnancies, 33 correct negatives, 8 false positives, 3 false negatives. In 50 tests on males, 100 per cent correct. In 50 tests on non-pregnant females, 98 per cent correct."

Dr. Emanuel Schwartz[3], of the Long Island College Hospital, reports:

In 268 normal pregnancies, 256 correct positives and 12 negatives. In 92 abnormal or interrupted pregnancies, 76 positives and 16 negatives. In 139 non-pregnant women, 128 negatives, and 11 positives.

Dr. Gruskin showed me the great kindness last winter of furnishing me a quantity of his antigen for making these tests. Our results are as follows:

In 13 normal pregnancies, 84.8 per cent correct reaction; 11 correct positives; 1 false negative; 1 false positive. In 3 cases for differential diagnosis, 100 per cent correct; 2 correct negative; 1 correct positive, an ectopic pregnancy. In 2 tests on males, 100 per cent correct. In 4 tests on non-pregnant females, 100 per cent correct.

Of the other hormone tests for pregnancy, the Aschheim-Zondek test, with its modification by Friedman, is the best known and most useful. Dr. Paul Titus[4], states the fact clearly: "The Aschheim-Zondek test for pregnancy was based primarily on the interlocking facts, first that the urine of pregnant women after the third week contains some substance, the biologic effects of which resemble those of the anterior lobe of the pituitary body; and, second, that this substance like what Aschheim-Zondek have termed prolan A of the pituitary body, is capable of stimulating quiescent genital organs of animals into a state of estrus or "rut." In their application of these facts they injected the urine of pregnant women into immature white female mice that had never had estrus. There were numerous practical problems to overcome in performing this test, such as difficulty in getting mice of the right age, the small organs of the mice, etc.

Friedman[5] and Lapham improved the original technique by using rabbits instead of mice. They state, "The ovaries of an isolated, unmated female rabbit contain neither corpora lutea nor corpora hemorrhagica inasmuch as a rabbit does not ovulate spontaneously, but only after coitus." This fact makes it possible to use an ordinary female laboratory rabbit which has been isolated. A rabbit can be used repeatedly as it is not necessary to kill it. Antiseptic care is used and the abdomen closed after inspection of the organs. Friedman's work has been confirmed by a number of workers and in turn has been modified to some extent. The exact technique of the different workers may be consulted in their writings.

CARE

Follow-Up Visits: After the initial examination and the diagnosis of pregnancy has been made, then begins the task of seeing that the prospective mother gets the best of care. The better health she has at the time of labor, the better and faster will be her recovery. We should insist on visits once a month to the seventh month and then every two weeks. If signs of complications appear the visits should be made as often as is indicated.

The following points should be considered in the care of the pregnant woman:

Diet: The diet of the pregnant woman must be planned so as to allow for the growing needs of the fetus. If an abundance is not supplied daily we must remember that nature will draw on the mother's tissues for any nutritive elements the fetus may need. During early pregnancy; if the toxemia associated with the morning sickness occurs, the appetite of the mother must be considered. Carbohydrates are useful at this time to reduce the toxemia. After the third or fourth month the mother's appetite generally improves, and with it the caloric intake is naturally increased.

During later pregnancy, Woodward and Gardner[6] tell us that, "During the latter months of pregnancy a slight increase of the fat intake is necessary, as it is of value in increasing the clotting time of the maternal and fetal bloods. Butterfats, egg yolk and cod liver oil are good fat foods because they favor calcium absorptions at the same time. Protein restrictions in the latter months of pregnancy has been found to be harmful. Different authorities all agree that much more harm is done by using too much salt and by eating highly-seasoned foods than by eating normal amounts of meat. Protein is necessary to maintain the hemoglobin content of the blood and to prevent maternal and fetal hemorrhage by shortening the bleeding and coagulation time."

The following is suggested to the patient: One quart of milk daily. Two servings of green vegetables daily—spinach, lettuce, cabbage, peas, beans, cauliflower. One or two eggs daily. Meat daily—seafood to be used twice weekly, and liver once weekly. Fruit—a grapefruit, two oranges or an apple a day. Stewed or baked fruits may be used if preferred. A liberal amount of bread and butter is advisable. Six or eight glasses of water daily. Two teaspoonsful of cod liver oil, or one perle of the concentrated form should be taken daily. For patients to whom milk is

distasteful or who are allergic, dicalcium phosphate may be prescribed. Iodine in sufficient amounts for the pregnancy may be obtained from the eating of sea foods.

Weight: Most writers say that 20 to 25 pounds increase above the normal weight is the best. If there are sudden gains of five to eight pounds a month, look out for signs of edema and toxemia. The patient should be weighed at each office visit. From Arnold I have learned the valuable procedure of reducing the salt intake and of balancing the fluid intake with the urinary output. The patient simply measures the urinary output for 24 hours. Then that amount equals the amount of liquids she is allowed to drink the next 24 hours. The results are surprising.

Exercise, Rest and Bathing: We recommend a daily walk out-of-doors, and while walking, some deep inspirations should be taken. Tennis, golf and horseback riding must be postponed. Long automobile or train rides may cause trouble. An hour's rest every afternoon is very beneficial. She should avoid real hot or cold baths. Swimming, if the water is not cold, is allowable up to six months.

Marital Relations: The safest time for marital relations is between the third and sixth month. It is forbidden after the sixth month, and also at the period time cycle.

Clothing: She should keep comfortably warm and wear broad heel shoes, preferably one size larger than normal. Maternity corsets may be worn if the patient suffers from backache. Round garters should not be worn.

Tobacco: If the mother is far enough along in gestation that the fetal heart tones may be heard, it is known that the inhalation of tobacco smoke causes the fetal heart tones to be speeded up. It is known, also, that the brain and nerve cells are more delicate and more susceptible than the heart muscle. Therefore, we tell the patient that while we cannot tell just what damage is being done to these delicate tissues, it is better for her to cease smoking during pregnancy.

Fainting Spells: If the patient has a tendency to faint, she should be warned not to drive a car alone. These attacks are said to be due to indigestion, or perhaps some hormonal action. Smelling salts or aromatic spirits of ammonia should be carried in the purse for quick use.

Cramps: These usually come in the legs and at night. They often seem to be due to early tetany, and may be relieved by large doses of viosterol.

Varicose Veins: Appearing during pregnancy are best relieved by prompt bandaging with an elastic bandage. Ordinary bandages are useless. The injection treatment for selected cases is used by some obstetricians even during pregnancy with satisfactory results.

Leucorrhea: Most women have a "physiological seepage" from the vagina during pregnancy. If there is a foul odor, itching and soreness, then search should be made for trichomonas vaginalis, monilia or the gonococci.

Incidental Complications of Pregnancy: Such as appendicits, gall bladder disease, necrobiosis or red degeneration of fibroids of the uterus are all best handled as though the pregnancy did not exist. In other words, if it is necessary to operate, do it.

The diabetic mother should be under the care of one who thoroughly understands diabetes. It is well to remember that diabetes in the mother often produces a hypoglycemia in the newborn infant. To counteract this, the baby should be given glucose subcutaneously and by mouth soon after birth.

HABITUAL ABORTION CASES

Mazer and Goldstein[7] several years ago developed an endocrine therapy which we have used successfully for cases of habitual abortion. It is as follows: "Two ampules of corpora lutea extract are injected subcutaneously every other day for the first 20 days of each month until the fetus becomes viable. (We substitute proluton 1/5 unit for the corpora lutea and also add wheat germ oil by mouth for its vitamin 'E' content.) In addition to that the patient receives ½ grain of desiccated thyroid tissue for the first two weeks of each month, and four grains of sodium iodide the other two weeks, thus alternating the two drugs unless the pulse rate rises abnormally, in which event the treatment is discontinued. Sexual intercourse is forbidden in these cases."

HYPEREMESIS

Since many women seek their physician quite early in the pregnancy, we have a better chance to help them with the nausea and vomiting of that period. Small and frequent feedings, five or six times daily, with the elimination of liquids at meal time, is very helpful in the mild cases. Water is best given in small amounts, beginning an hour after meals. The anti-vomiting tablets containing alkalies and sedatives frequently help these cases. Nembutal (grain II) rectal suppositories we have found to be useful in securing quiet and sleep.

Since Sussman's article[8] appeared, we have tried the effect of parathyroid extract intramuscularly, combined with the intravenous injections of calcium gluconate every second day. The results in most cases have been gratifying. It seems necessary to give both the calcium and the parathyroid extract. If the patient fails to respond to the above treatment we urge her to

go to the hospital, where isolation and more energetic treatment can be carried out. In the hospital we make an especial effort to assure her that now she is going to get well. After making her comfortable, visitors are restricted. Then all food by mouth is stopped for at least 24 hours. The bowel is emptied by enema. Intravenous injections of dextrose solution, 1000 cc. of 10 per cent solution in normal saline is given every 12 hours. After the stomach has had its rest and the patient feels more like eating, food, largely carbohydrate with some protein, is given in frequent but small servings. Liquids are not allowed with the meals. The vitamins A, B, D, and E should now also be given. A therapeutic abortion almost never has to be performed.

TREATMENT OF ECLAMPSIA

We shall not attempt a complete discussion of the treatment of eclampsia. Thank goodness! as we improve in our prenatal care, we see less and less of true eclampsia. We will all agree that there is a definite tendency in this country to treat eclampsia quite conservatively. After studying the treatments of such leaders as Strogonoff, DeLee, Titus, and Arnold and Fay, I submit to you the following brief summary of treatment:

1. Secure rest and relaxation by isolation and the use of morphine by hypodermic injections, and chloral and bromides or penta-barbital by bowel. Magnesium sulphate, 20 cc. of 10 per cent solution hypodermically or intravenously may also be used. (Calcium chloride, 25 per cent solution in ampule form for intravenous use in case of magnesium sulphate poisoning, i. e., severe respiratory embarrassment, should be on hand.)

2. The intravenous injection of strongly hypertonic dextrose solution every 8 to 12 hours.

3. As soon as advisable after the second stage of labor is reached, the baby should be delivered by forceps or otherwise.

4. Many authorities omit colonic irrigations, gastric lavage or purging and sweating because it disturbs the patient too much.

5. Venesection has been given up by most workers as depleting the blood volume is more harmful than removing an uncertain amount of toxin.

6. Spinal drainage, 40 to 60 cc. as the pressure or flow indicates, is used especially at Temple University.

One dare not relax in his care of the patient even at the end of the pregnancy. Taking advantage of roentgenology will at times save embarrassment and defeat at the time of labor.

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Cardiac Irregularities

From a standpoint of frequency extrasystoles or premature beats should be considered ahead of auricular fibrillation, for relatively few people reach middle age without sometime or other manifesting this type of arrhythmia. These premature beats are of three types, namely, ventricular, auricular, and nodal, but it is not possible to differentiate them except by means of the electrocardiograph, and as for the most part this type has relatively little clinical importance; it is not worth while to put the patient to this additional expense. They may occur in perfectly normal hearts as well as in association with definite heart disease. These extrasystoles occur in individuals who are high-strung and nervous, who use coffee, tea, and tobacco to excess. This is especially true of tobacco. Extreme fatigue, either mental or physical, is apt to bring on this type of irregularity. It is never seen when the heart rate is 120 and over and rarely when the rate is a hundred. If the patient is made to exercise sufficiently to increase his heart rate to 120 these extra beats will entirely disappear only to reappear when the pulse rate returns to normal. This is also true if the rate has been increased by drugs. Changes in position are supposed at times to have the same effect.

The premature beats are most often ventricular and when a single premature beat occurs in a regular rhythm a cardiac impulse can be made out at the apex with two extra sounds, if the aortic valves are opened, and also a weak premature beat can be made out at the wrist. If the beat is too weak there is nothing felt at the wrist to go with the extra sound at the apex. As previously stated premature beats account for most of the bigeminal, trigeminal, and similar types of pulse irregularities. By very careful observation it can be made out that in premature beats of ventricular origin the time interval is the same as that of two beats of a normal rhythm. Often these extra beats occur with sufficient frequency and force to keep people from getting their proper sleep and cause considerable anxiety and annoyance.—C. R. Thomas, M.D., Chattanooga, Tenn., Jr. of the Tenn. State Med. Assn., Vol. XXXI, No. 7, July, 1938.

HEREDITARY FACTORS IN GROWTH AND DEVELOPMENT

By ALBERT J. BELL, M.D., CINCINNATI, OHIO

THIS innocuous title covers a most complicated subject. Theoretically it has nothing to do with postnatal environment, but actually the two facors are delicately interwoven and the limitations of each and their relationship to each other must be sought.

To understand the subject, we are required to begin with the egg (ovum or ovulum) and sperm at the time of fertilization.

The hereditary or genetic factors or genes reside in structures called chromosomes which are in the nucleus of the germ cells. All genes are double and are arranged methodically in linear fashion in two sets of chromosomes which are placed in pairs in each cell. It is by means of the chromosomes that the genes or hereditary factors reach the child.

The germ cells from both parents at the time of fertilization initiate a process of cell division and reduction. The genes and chromosomes behave similarly to the germ cell. The former or gene which is double divides and each part retains all qualities of the parent cell. A chain of chromosomes splits and each chromosome retains the same genes as the other.

By this means of reduction, the original cell which had two sets of chromosomes, now has one set containing one of each kind of chromosome that came from the original paternal and maternal source. Each parent contributes a complete set of genes in equal number. Expressed differently, the ovum from the mother and the sperm from the father, each contribute all that is necessary to produce a complete individual. Each child, therefore, starts life as a double individual. Separation of these factors, that is, division of one fertilized egg, results in two perfectly similar persons, known as identical twins. Each gene in a pair of chromosomes is matched by a corresponding gene in the other chromosome. Both genes and chromosomes are in pairs.

The number of chromosomes is usually constant for a given species. In man there are 24 pairs,—one member of each pair received from each parent.

After this division of germ cells, in which process the genes and chromosomes take part, there is a reuniting in more or less haphazard fashion. Genes always unlike, may become further changed and some may be lost entirely in the reshuffling. This unlikeness (called heterozygosity) combined with their haphazard assortment in the uniting of egg and sperm is the cause of differences among children of the same parents.

Read before the Section on Pediatrics, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

The Author

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Various combinations result according to whether or not the paired chromosome does or does not contain a certain gene. Chromosol complexes may occur in combinations up to 976. In other words, there is a uniting of the germ cells of both parents. These same cells with their genes and chromosomes divide and are united in an orderly manner. That is, the genes that have not been destroyed have been reunited in equal number from each parent and represent the substances which eventually establish the character of the individual. Such a mechanism answers all requirements for the physical transmission of unitary substances which is implied in alternate or mendelian inheritance. The mendelian laws operate only when the distribution and exchange of chromosomes are undisturbed. In the crossing of races we find at least a modified exception to the mendelian law.

It must be borne in mind that the chromosomes are arranged in pairs and that each gene in a pair is matched by a gene in the other chromosome. If a gene is destroyed, the individual is altered to that extent. Chromosomal defects are more apt to occur in closely related parents.

The random assortments of chromosomes, and their occasional alteration or destruction may explain why an individual of superior ability may come from inferior stock and the reverse.

Up to this point, we have been considering the hereditary or genetic factors which are transmitted from the ovum and sperm. Recognition must be had of the surrounding media of the developing fetus to which we will refer as the internal or prenatal environment. Factors that influence development are, an abnormal placement of the fetus, improper nourishment from the mother, transmission of hormones through the placenta from the mother to the fetus and of toxins due to disease of the mother. Normal development then must depend upon a satisfactory combination of genes and a favorable internal environment.

Disease of the endocrine glands may cause

great modifications in the growth of the finished product. This is to say then that the internal environment influences growth. Are these abnormal types, such as achrondroplasia and others, due to genetic factors alone or to the inheritance of abnormal endocrine glands or to a combination of both?

A study of invertebrate animals and plants that are lacking in these specialized glands show abnormal forms. The results of animal crossings point to the inheritance factors as being responsible for these abnormal types. Is it not then true that if inheritance factors can cause abnormality, inheritance factors can retain or cause normal growth?

The phenomena of variations refers to the interrelation of the attributes of the germ cell with the internal environment. There are three varieties:

I. Modifications or paravariations,—With the same hereditary equipment, there are varying circumstances of development.

II. Combinations or mixavariations.

The union of two cells of different hereditary equipment.

III. Mutations or idiovariations.

A change in the makeup of the idioplasm or hereditary equipment, resulting in corresponding changes in their secondary external characters.

The properties of the genetic system were not worked out by chemical or physical means, but were discovered by laborously removing certain tissues from the egg and substituting others in their place and noting the changes that took place in the resulting individual. It was found that in the egg there are from 500 to 1,000 or more distinct substances each having its own part to play in development. This process of removal and substitution of one substance for another underlies what we call mendelian and sex heredity.

These varied substances in the fertilized egg are known as genes. They are arranged in the structures visible as chromosomes. By cytological and genetic methods, it is seen that each chromosome is a chain of these particles, chromomeres, visible under the microscope, which are themselves the genes or contain them. Each gene has its own special function and its place in the chromosome.

The pairing of the genes must be kept in mind and the following underlying rule for inheritance:

"Each parent gives one gene of each of his pairs to the child, so that each child has one gene in each of his pairs from the father and one from the mother".

With two dissimilar genes of a certain pair, three distinct things may occur:

Usually, where one gene in a pair is defective, the other normal, the normal gene dominates and the individual with the defective gene is normal. The defective condition is called recessive.

Where one gene in a pair is defective, occasionally the defective gene predominates.

When each gene in a pair, one from each parent, is defective, the resulting individual is defective.

However with neither gene in a pair defective, one may be dominant, the other recessive. Example,—one gene tends to produce dark eyes (dominant) the other blue or gray eyes (recessive), resulting in dark eyes.

This is the simplest form of mendelian inheritance and is dependent upon one gene.

A trait may depend upon two or more genes, as in the pigmentation of the skin of the negro. This depends upon the presence or absence of potentialities for black in the genes. All such genes present means a full black negro, three fourths a black, half a mulato, one fourth a quadroon, none present, a white.

As we have already seen, inferior children may be born of superior parents and the reverse. H. S. Jennings has said that there is a Dr. Jekyll and Mr. Hyde effect in the phenomena of inheritance that is most disconcerting.

The most common ratio in mendelian heredity is three normal or dominant, to one defective or recessive. A normal gene counteracts in the next generation a defective one. Because of these recessive potentialities, there may or may not be something for a suceeding generation to worry about. According to this, the offspring may be bright or stupid, structurally or physiologically normal or abnormal, regardless of the apparent characteristics of their parents.

Pairing and matching of genes must be constantly kept in mind.

If in the parents, both genes in the same pair are defective the offspring will receive two defective genes in the pair and be defective. If they are normal in a pair, their offspring will be normal in respect to that pair.

If the parents have two defective genes, but in different pairs, the offspring will receive a defective one from one parent and a normal one from the other. If the effect is recessive, the children will be superior to their parents.

In other words, one parent may be color blind, the other dull and deformed, but if the defective genes are matched by normal ones from the other parent, the immediate offspring would show none of these things, but something might show up in later generations as recessive traits.

The largest number of great men come from mediocre parents, as mediocre people occur in greatest numbers.

There are two methods of determining the

characteristics brought to us by genes and heredity.

I. Through the study of twins.

II. The characteristics that are inherited in the mendelian ratio.—

There are two classes of twins,—identical and fraternal or ordinary.

Identical Twins—They have the same combination of genes and come from a single fertilized egg. After division of the egg, two individuals are formed. Fraternal twins come from separate eggs and are no more alike than their brothers and sisters born at different times.

Sometimes the egg in identical twins does not completely separate and we have the unfortunate situation which we recognize as the "Siamese twins".

The one egg twins are always of the same sex; two egg twins may be different or the same.

As briefly as possible, the physiological and physical characteristics of identical twins that are similar in each are;—their figures, color of hair and eyes, their weight and height, also their imperfections. Added to this, their blood and glandular types, mentality, general constitution and immunity to disease and, in the main, their emotional characteristics, and many other features.

Their mental characteristics with reference to education, the home environment and external influences have been studied extensively by Newman, Muller, Lange and others.

In 50 cases of Newman's, the differences in the intelligence quotient was 5.3, with similar results for will, temperament and emotions.

Muller studied one pair of identical twins who lived apart for 30 years—They were alike in intelligence and different in will, temperament and emotional reactions.

Newman found that two identical twins who lived apart for 18 years, differed in intelligence, but were alike in will, temperament and emotions.

Cases have been reported in which identical twins have lived apart and continued to be alike in these respects.

It is only reasonable to suppose that wealth or poverty, education or the lack of it, good hygienic surroundings or the reverse would exert some influence on temperament, emotions and even the will. While the basic fundamentals may not be and probably are not changed, experiences and knowledge will certainly alter our response to external factors.

Lange studied the moral angle in identical twins in the records of 30 convicted criminals. Of 13 pairs of identical twins, the other member was a criminal in 10 out of 13 cases.

There are four types of inheritance—

I. Sex inheritance.
II. Sex-linked Inheritance.
III. Autosomal or Typical Mendelian Inheritance.
IV. Inheritance Through the Y Chromosome

I. Sex Inheritance, or the Inheritance of Sex.

In man, in the male, the X chromosome has a mate designated as Y which is functionless at times.

The female has a pair of X X chromosomes, the male having an X Y chromosome.

Paired chromosomes that are alike in male and female are called autosomes.

An increase in the X chromosomes turns the development toward the female side: an increase in the autosomes (paired and alike chromosomes in both male and female) toward the male side.

II. Sex-linked Inheritance or Inheritance Through the X Chromosome.

As the male has but one X chromosome, recessive characters are more often manifested in males than in females, because the additional X chromosome may become dominant and prevent the recessive characters from becoming manifest. Such examples are found in color blindness and hemophilia. Color blindness is a recessive character resulting from a defective gene in the X chromosome. It is seldom transmitted to the female.

III. Autosomal or "Typical Mendelian Inheritance."

This means what it says, that is, inheritance through the autosomes or typical paired chromosomes that are alike in male and female. As the autosomes occur in the proportion of 23 pairs to one pair of X chromosomes, it is evident that this type is a much more common occurrence than that of sex-liked inheritance.

IV. Inheritance Through the Y Chromosome.

The Y chromosome is found only in males and descends from father to sons. Any resulting characteristics will be found only in males and are never derived from the female. They would appear to operate as recessive traits.

There are certain abnormalities and defects which we know result from defective genes. The endocrine glands play a part in this and we again go back to hereditary or genetic factors when we say that in all probability, these factors are influencing or working through these special glands. Well known abnormalities such as dwarfism and gigantism may be mentioned.

Among the defects which are inherited are abnormalities of the hands, feet and digits, such as syndactylism (webbed fingers and toes), brachydactylism (shortness of fingers and toes), defects of ears, nose and teeth, harelip, deafmutism, mental defects, certain types of insanity and diseases and abnormalities of the blood. We know that allergic conditions such as hay fever and eczema and, in many cases, high blood pressure may be inherited.

We have seen that different characteristics are

apparent in various families. It is also true that the race and the crossings of races leave their distinctive marks on the physical characters of individuals. This applies to size and shape of skull and other features, color of skin, quantity of hair, stature and in many other ways.

How far can our environment influence our inheritance? One born with ordinary or inferior ability in mathematics, music, painting and in the realm of sport, may by great effort, partially overcome these handicaps and attain a certain proficiency, but could never become a Newton, a de Vinci, a Paderewski or a Tilden. Behavior, training and early experiences seem to exert more influence upon the individual. While he can not alter his potentialities, habit and training may dictate his future course. This applies to such emotions as fear, anger, hatred and jealousy which form such a large part of our behavior.

An intelligent response by the mother to the infant's cry is her first opportunity in directing her child's behavior. The wrong response in guiding the emotions and habits of the infant may lead to many difficulties later in its association with other children and in the child's reaction to its environment. From birth to eighteen months everything tends to revolve around the infant. The period from eighteen months to two years finds us striving to properly fit the child into its home surroundings. After that the little individual attempts an adjustment to the outside environment or the community, and much depends upon previous training.

H. S. Jennings has contributed some constructive information with reference to the adoption of children.

The child's heredity is not known by merely knowing the parents. A new combination of genes is formed with every child. He may be like or unlike them. However, they are more likely to be similar to their families than dissimilar, and the risk is great in adopting a child from inferior stock. Feebleminded and dull children do not respond to environment. Superior combinations of genes will profit most from environmental conditions. Special weaknesses may be restrained or partially corrected.

On the whole, with reference to mentality and character, those who have made a study of the subject feel that differences in heredities exert a much greater influence than differences in environment. A record of at least three generations is necessary in order to determine the type of inheritance involved.

ANALYSIS AND INTERPRETATIONS

We have determined that the hereditary factors are bound up in the genes in the chromosomes and that they affect us, in the main unalterably, in the expression of the mendelian law. It is true that the internal secretions and internal environment (prenatal) play a part in developing the finished product. It is thought to be likely that the hereditary factors act through the secretions or glands, as well.

Certain physical and mental traits are undoubtedly inherited. Environment, education and training may modify these to a certain extent. Athletic training may broaden an individual's chest and increase the size of his muscles, but make little if any change in his type of stature. If the endocrines are disturbed, we may by means of therapy correct this. Fat may be redistributed or reduced.

With good nourishment and proper hygienic conditions, individuals may gain in weight. With less nourishment they may lose weight. But "which of you by taking thought can add one cubit to his stature?" This in spite of some optimism to the contrary. Healthy environmental conditions may play an important part in an individual who has inherited susceptibilities, so that disease does not come to him. Good influences and training to desirable habits will unquestionably tend to prevent our yielding to hereditary traits.

Education will improve our abilities, but we can go no further than our hereditary potentialities. What we acquire can not be transmitted to our children. Taking into consideration the genetic factors, the influence upon them by internal or prenatal environment and by external or postnatal environment, there is a certain definiteness in heredity.

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Kenenth D. Blackfan, M.D., Chairman, White House Conference on Child Health Protection. Growth and Development of the Child. Part I. Heredity and Environment; Part IV. Appraisement of the Child: 1. Mental States. 2. Physical States.

DISCUSSION

Donald C. Mebane, M.D., Toledo, Ohio: Dr. Bell has brought out in some detail the hereditary factors in growth and development.

Many of you, I imagine like myself, have forgotten just how these factors work. We do know that any study of human heredity is beset with difficulties. I think, therefore, that in the discussion of Dr. Bell's paper we might, as practicing pediatrists, partake of a practical consideration of the subject. Surely no one sees more evidences of hereditary tendencies than do we.

For example let us for a moment consider the shape of the infant's skull. At first the natal

influence is observed due to moulding or trauma. The shape of the head may be due to a contracted pelvis in the mother. This in turn may be due to old rachitis in the mother or to an inherited shape of the pelvis. Again the infant's head may attract no attention at first but after a few months may become quite misshapen. This is definitely not due to lying on one side or to soft bones as this phenomenon is more common than rickets. It is due to the fact that the brain is somewhat of a double organ. One hemisphere is frequently more forward or different in shape or size than the other. Usually toward the end of the first year development catches up and the malshaped head is much less apparent. Later in childhood we often notice the definite hereditary influence in the shape of the cranial bones.

I have in my practice a child of eight years who has a widely open anterior fontanel. His father has a similar condition and he states that he knows of one ancestor who has the same.

Sometime ago I was called to see an infant of two years with measles. This child was a microcephalic idiot. I noted that one older child and the mother were microcephalics of low mental order. However, one little girl of 11 years was bright and quick to react. She really was the mother of this large family. We know that this is an inherited condition and that this girl who has a small but normal brain herself, can pass on this pathology. Sterilization laws would not cover such a case.

I had the opportunity myself once to study a family among which there were 50 people of low mental order in only three generations.

The question of the adopted child is important to the pediatrist. It has been my policy in advising a family about the adoption of a specific infant to try to obtain as complete an hereditary background to at least include the parents and grandparents of the infant and other members of these generations, as is possible. Where this has been done with careful observation of the infant, the results have turned out to be almost universally favorable as to later growth and development even though the infant was adopted in the first few weeks of life.

A careful consideration of the prospective parents is also advisable as adoption of a superior child by inferior parents is a sad state of affairs.

Personally I dislike to be involved in any argument on the relative importance of heredity and environment. As Dr. Bell has implied we are definitely limited by our heredity. Environment and opportunity can not make a normal child out of an idiot nor a superior child out of an average child.

The appreciation of the importance of proper training and environment at the earliest possible age is, I believe, tending to make the average child more normal than heretofore.

The term quack is applicable to all who, by pompous pretenses, mean insinuations and direct promises, endeavor to obtain that confidence to which neither education, merit nor experience entitles them.—Samuel Parr.

The normal tends to conceal while the hysteric prefers to reveal his physical defects.—Fetterman.

Individual Disease

Now what is the formula in medical education which will give to each turn of mind the pabulum which will develop it to its fullest usefulness in medicine? Obviously each type will require a somewhat different sort of diet. He of the intuitive mind must scale the rugged mountain of fact and learn the ways of accurate observation, measurement and record. But the reasoner must travel, in order to apprehend by passing glance and hearing and other sensuous means the differing qualities of races, nationalities and individuals.

But travelling does not necessarily mean changing one's position in space. It is rather an attitude of mind seeking adventure. For it is possible to travel in books, in conversation, at the theater, and in the foreign countries of other men's thoughts. But travel he must. This was always a teaching of Paracelsus: "A doctor must be a traveler," he said, "because he must enquire of the world. Experiment is not sufficient. Experience must verify what can be accepted or not accepted. Knowledge is experience . . . The Universities do not teach all things, so a doctor must seek out old wives, gypsies, sorcerers, wandering tribes, old robbers and such outlaws, and take lessons from them. We must seek ourselves, travel through the countries and experience much, and when we have experienced all sorts of things we must hold fast that which is good."

There is no danger that anyone who has travelled, geographically speaking or by transport of the mind, will think of human beings as he would of a colony of ants. He will see only individuals. More than that he will be able to recognize innumerable expressions of personal identity. And so I believe that any medical curriculum is inadequate which fails, as its first requirement, to demand of the student as much knowledge of the whole individual human being as possible. For it is a biological inevitability that the individual Man should have his own individual disease.—George Draper, M.D., New York; Ill. Med. Jr., Vol. 74, No. 1, July, 1938.

A List of 27 Diseases

Which Late Cutaneous Syphilis May Resemble:

Tuberculosis, erythema induratum, leprosy, actinomycosis, blastomycosis, sporotrichosis, psoriasis, eczema, epidermophytosis, pyoderma, epithelioma, varicose ulcers, lupus erythematosus, erythema nodosum, lymphoblastoma, bromoderma, sarcoma, furunculosis, carbuncle, yaws, mycosis fungoides, rhinophyma, sarcoid, granuloma annulare, acne rosacea, traumatic ulcers, seborrheic dermatitis.

Do a blood serologic test.—Supplement No. 5. Venereal Disease Inf., U.S.P.H.S.

POSTPARTUM FEVER

By WALTER K. GREGG, M.D., Dayton, Ohio

IT is not the purpose of this paper to discuss all the puerperal infections as they are classified in the literature according to etiology, signs, symptoms, pathology, diagnosis and treatment, but rather to summarize some of the more common pathologic conditions that our puerperal patient may be suffering from when we are told she is running a temperature. Most cases of fever in child bed are due to child bed fever, but this must not lead us to overlook other conditions just as important and exasperating. It is discouraging indeed to examine a patient who has been getting douches because of postpartum fever to find that her fever is really due to tonsils, breasts, influenza, pyelitis, or enteritis. Thus in any case of puerperal sickness, it is wise to subject the patient to a complete and careful examination, and by a process of elimination and exclusion, determine that the pathology lies without or within the pelvis. A brief but concise history of previous infections prior to or during the prepartum period may lead to the offending organ, such as ears, teeth, tonsils, previous mastoid, chest, or kidney conditions. A patient having a history of previous chronic otitis media may, due to the effect of vomiting during or after anesthesia, light up her old infection. During the winter season especially a patient with infected tonsils may have a sudden exacerbation due to the same cause. The same is true of patients with certain subacute chest infections, being quiet during pregnancy, but rebounding following irritation by anesthesia and vomiting. It is important then to examine the ears, nose, throat, and chest of our feverish puerperal patient.

Following an anatomical survey we next come to breasts. Standard obstetrical texts tell us engorged breasts do not produce fever. Nevertheless, it has been our experience that patients with fever during the engorgement stage of lactation, readily respond to sedation, limitation of fluids, and the application of a tight breast binder with an ice cap to each breast. Perhaps this may be explained by protein absorption or calcium deficiency? A small crack in the nipple without external evidence of infection may produce fever long before lymphangitis is present. Then too, the patient may have a frank mastitis or beginning abscess.

On our service at Miami Valley Hospital we have observed a great number of patients with fever plus abdominal distension within 36 hours following delivery that have promptly responded to free elimination. What is the offending factor? So far we have no definite explanation unless energetic action of the bowels affects the uterus and stimulates it to contraction, expelling clots, lochia, and detritus. Toxemia of intestinal origin usually occurs in cases of neglected constipation, occasionally in patients having daily evacuations before delivery; and the fever may reach 105°, usually without a chill. With purgation, the fever promptly subsides. It must not be forgotten "that a full rectum may cause a stasis of lochia in the vagina," and the fever subsides following an enema or purgation, the case may have been one of infection rather than absorption of toxins from the intestinal canal. One cannot overlook the fact that abdominal pain with fever may be due to acute appendicitis, cholecystitis, or bowel obstruction.

The next step should be examination of kidneys and bladder. Usually palpation will elicit kidney tenderness. A catheterized urine should be examined, with special attention given to residual urine.

If no plausible explanation has been found so far, to which to attribute our patient's fever, then the birth canal should be investigated. A short study of the history of labor may indicate at once the site of infection: for example, a forceps delivery with extensive injury to the cervix may be followed by cervicitis, endometritis, and perimetritis; vaginal tears may be followed by vaginitis, parametritis, and bacteremia. Very often fever is the only symptom of infected traumatic lesions of perineum, vagina, and cervix. Early, suppurative discharges are often lost in the lochia, leaving only redness, superficial induration, and unusual tenderness as positive findings. Pain may be present in perineal affections, but pain in the vagina and cervix usually means cellular invasion to surrounding structures.

A sapremia is recognized by its rather sudden onset with high intermittent or remittent fever, frank hard chill during the rise of fever, relative slow pulse, and profuse, thick, foul-smelling,

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gaseous discharge, the patient usually remaining quite sthenic, with little subjective malaise.

Infections of uterine contents, endometrium, and uterus are often characterized by the same symptoms. Pain is an inconsistent symptom, although the uterus is usually tender and boggy. Lochia very often is scant and without offending odor, inadequate drainage being indicated by uterine cramps. These patients usually run a low grade fever for two to three days, followed by a rise to 104° to 105°, then a chill. Constant throbbing pain localized in the uterus usually indicates invasion of the uterine wall.

Parametritis and pelvic cellulitis again offer only fever as a constant symptom. However, after 24 hours of fever, pain is marked on one side of the uterus or the other, due to the development of exudate passing out through the leaves of the broad ligament, putting tension on the peritoneum. The actual formation of an abscess in cases of subsiding infection may be marked by some relief of pain, whereas in progressive suppuration pain is increasingly severe. The course of extension of pelvic cellulitis is usually marked by pain and it is important to look for suppurative areas above Poupart's ligament, between vagina and rectum, between vagina and urinary bladder, and along the psoas and gluteal muscles.

Extension of infection to the peritoneum is usually marked by rapidly spreading pain more acute than pain of cellulitis, and the temperature rises sharply with only slight remissions. If the process becomes localized, then alarming symptoms may be absent, but if the condition becomes generalized, then ileus develops, accompanied by vomiting, circulatory depression, high sustained fever, diffusing abdominal pain, muscular rigidity, ascites, and usually death.

Infections of the adnexia are nearly always secondary to pelvic cellulitis or peritonitis and do not give rise to any immediate important symptoms. Gonococcal salpingitis is the same as in cases of non-puerperal origin.

Thrombo-phlebitis probably occurs to some extent in all cases of cellulitis. The symptoms are similar to cellulitis except that pain is less severe and chills more frequent. Phlegmasia alba dolens may occur in severe form without any previous sign of infection other than a mild sapremia. Swelling and edema below the occluded vein usually refer the diagnosis with or without pain, but it should be remembered that these symptoms may not accompany occlusion of the femoral, iliac or vena cava.

The question of bacteremia always arises concerning our septic puerperal patient, for clinically one may not be able to determine from the symptoms whether she has a local infection with toxemia or whether the blood stream harbors bacteria that are destroying its cells. Unless many culture media are used, both anaerobic and aerobic, a sterile blood is not conclusive evidence one is not dealing with a blood stream infection. Ordinarily, however, the severity of illness, with continuous high fever, very rapid pulse, severe prostration, etc., concludes a bacteremia.

It is necessary then, wherever the infection be, to determine if possible the causative organism responsible for our patient's fever, at least the one taking the leading role. Cervical and vaginal smears should be taken early because soon these areas are swarming with bacteria. The fact that certain organisms are found in the lochia does not mean that that particular organism is causing the infection. If one finds a large number of a certain organism overshadowing all others or a pure culture of a certain organism, then he might say that is the offending organism, especially if the same germ is recovered from the blood stream. The gonococcus is readily identified in the lochia, if present, and is commonly associated with the staphylococcus and streptococcus, but very often it is the streptococcus that is causing the trouble. We all know of cases of gonorrheal ophthalmia in babies whose mothers run a perfectly normal puerperium. The same is true for tubercle bacillus, streptococcus, pneumococcus, staphylococcus, colon bacillus, etc. However, if one of the above organisms also be recovered from the blood stream of the septic patient, then the diagnosis is certain.

Certain obscure fevers coincidental with the puerperium may come to light only after serological studies, namely typhoid, paratyphoid, and bacillus abortus infections. It may be well to remember to inject two minims of bacillus abortus vaccine intradermally in the unexplained feverish patient, for she may be suffering from that disease. We had such an experience on our own service at Miami Valley Hospital.

In summing up the various conditions from which our postpartum patient with fever may be suffering we believe that a careful physical examination of all the systems should be made and that the fever should not be considered genital until definitely established by positive findings.

DISCUSSION

C. C. Borden, M.D., Miamisburg, Ohio: Dr. Gregg has covered a wide field in a very concise manner.

While not dealing with therapy, I am inclined to challenge the advisability of a case of postpartum fever receiving a douche until a diagnosis is made and then it may be a doubtful procedure.

Many public cases come to us that we have not seen or checked previously as they are sent in for a difficult labor but certainly to discover a chest, ear, mastoid, tonsil or kidney, that has flared up from an old process puts emphasis upon a complete and early pre-natal history and examination. This may be done even before

pregnancy occurs when we are consulted as to the advisability of pregnancy, when a complete history, examination and functional blood and kidney check may be done.

As the frequency of the causative agency varies with the number of days postpartum, a division of the etiological agents, early and late, may be in order. This division is arbitrary and exceptions are frequent.

Early.—1.) Uterine infection—In acute endometrial infection a slight rise in temperature is noticed immediately and by the third or fourth day the elevation becomes marked. Concomitantly suprapubic tenderness and pelvic pain may be elicited by a vaginal examination. Lochia varies as to type of bacteria present. T. K. Brown has shown by culture methods that 80.5 per cent of uterine infections are due to anaerobic streptococci and he advocates D. & C., but warns that the operator must be trained in obstetrics and gynecology and well acquainted with the technique. The high incidence of anaerobic streptococcus in uterine infections has been corroborated by others.

2.) Respiratory Infection—Aspiration pneumonia, broncho-pneumonia, lobar pneumonia and upper respiratory infection are probably the next most common causes of fever in the early postpartum days, particularly after the administration of inhalation anesthetics.

Late.—1.) Genito-Urinary tract—Infection of the genito-urinary tract really belongs between early and late, but for simplicity I have classified it as late. Cystitis with coincidental or subsequent pyelonephritis is usually found. The offending organism in the majority of cases is B. Coli. Hinman reports an incidence of 70 to 80 per cent. Young, Hoston and Hill—58.7 per cent, T. K. Brown 62 per cent.

2.) Mastitis—By this I mean a frank inflammatory process involving the breast tissue. Starts usually as a lymphangitis with a localized area of inflammation. Cardinal signs and symptoms of inflammation must be present. Most all of these progress to suppuration and if treated early by rest and ice, may subside immediately. Cracked nipples as an immediate cause of fever is surely quite rare. Also an engorged breast may be associated with fever but we must not lose sight of the fact that this occurs at about the same time that our old friend puerpueral infection causes a rise in temperature, the infection in many instances being abortive in type or short lived. The same may be true of the distended abdomen about the third or fourth postpartum day with fever. May not the castor oil, by emptying the uterus, causing an increase of lymph and blood to the pelvis along with the hyperpyrexia abort a true puerpueral infection. The treatment as given by Dr. Gregg certainly should be used but the manner of its working may be a subject of dispute.

3.) Uterine Infection—A sudden rise in temperature on the eighth to tenth day with the development of lower abdominal pain is supposedly indicative of gonococcal endometritis and salpingitis. While this syndrome still appears, its frequency seems to be diminishing. I would like to ask Dr. Gregg if it is possible to identify gonococci by either culture or smear in lochia.

4.) Thrombophlebitis—This infrequent complication appears late and may run an abortive course or develop into the classical picture of phlegma alba dolens.

It might be well not to forget that puerpueral infection, always the bane of physicians doing obstetrics etiologically is nothing more or less than surgical wound infection and causes the most of our postpartum fevers, however else we may try to explain them.

Many women today both in the city and country are dismissed from care by physicians with one postpartum visit. Certainly one can not listen to a paper such as Dr. Greggs' without emphasizing the necessity for better postpartum care.

Nitrous Oxid-Oxygen Anesthesia

Clinical observations do not seem to support the view that anoxemia is the responsible fatal factor in the cases here described. There was no cyanosis, the respiration ceased suddenly and without struggle or warning. In several cases described in the literature the duration of the anesthesia was too short to produce asphyxia. Even Courville who regards the asphyxia as the decisive factor assumes at least for some of his cases "that a severe and ultimately fatal insult to the cerebral cortex was sustained · during nitrous oxid anesthesia without evidence of cyanosis".

The pathoanatomical findings point clearly toward the cause of the destruction of the brain tissue. These changes consisted in a pronounced swelling of the brain as described by Reichardt which was particularly impressive in the first case. According to Reichardt, brain swelling is an increase in the volume of the brain not produced by hyperemia or accumulation of free fluid between the tissue structures such as edema, meningeal hydrops, hydrocephalus and so on, or by tumors or inflammatory conditions, but is caused by retention of water by the cells and glial structures. A similar condition can be produced by swelling of colloids following addition of water which can easily be demonstrated by adding water to gelatine. We assume therefore that the nitrous oxid is capable of directly influencing the metabolism of the nervous tissue retaining the water in its structures, the resulting change being in some cases irreversible.

By comparing the histological changes produced by nitrous oxid with those demonstrated by Gildea and Cobb following ligation of the arteries, striking differences are found. Gildea and Cobb described focal areas of devastation interrupting the normal orderly laminations, which were almost invariably located in the third or fourth layers of the cortex. The destruction of the cerebrum due to nitrous oxid is never focal, but is either laminar or diffuse. In cases surviving 60 hours or more the laminar type is predominant, in cases dying during the anesthesia or six to eight hours after it, the changes are diffuse, affecting with equal severity the neurones in all layers of the cortex.—K. Lowenberg, M.D., Ann Arbor, Mich., and Theodore Zbinden, M.D., Toledo, Ohio. Annals of Surgery March-April, 1938.

THE PREVENTION AND TREATMENT OF NEUROSYPHILIS

By NICHOLAS MICHAEL, M.D., COLUMBUS, OHIO

THE prevention of neurosyphilis frequently depends on the recognition of early syphilis. A dark field examination is therefore essential on all suspicious lesions. Patients are much less likely to show late manifestations if treatment is started in the sero-negative stage. Adequate and continuous treatment in the early stage for a period of 18 months is the best preventive. A minimum of 20 injections of neoarsphenamine and a heavy metal are considered necessary even in the seronegative stage. A spinal fluid examination every six months during the treatment and observations of the patient once a year for five years will assure the physician that the nervous system has not been invaded.

It is now generally believed that treatment does not cause neurosyphilis. Masseas and Berger found cases in countries where treatment is seldom used. Grscheben, Stokes, Kemp and Menninger in a study of numerous cases, were unable to find any evidence that modern salvarsan therapy provokes neurosyphilis.

A study of the records of 695 male cases consecutively admitted to the Columbus State Hospital from January 1, 1926 to January 1, 1936, was made to determine if possible the part treatment played in causing neurosyphilis. Those who received treatment after neurosyphilis developed were not counted. No history concerning treatment could be found in 200 cases, therefore, only 495 should be considered with any degree of accuracy; 322 or 65 per cent did not have any treatment, while 173 or 34 per cent + had some type of treatment. Of the 173 that received treatment, 140 had over 10 injections and 23 had less than 10 injections of arsenicals or a heavy metal. Ten had local applications only, such as the cauterization of the chancre. In all cases the treatment was inadequate according to present day standards and it was either irregular or intermittent. Many of them were led to believe they were cured while others thought that further treatment was not necessary after the blood Wassermann was reported negative. A spinal fluid examination was not made in any of the cases until after the onset of mental and neurological symptoms. It is fortunate indeed that only 10 per cent of all syphilitics develop neurosyphilis for the treatment in this series of cases had been sadly neglected. The above findings further substantiate the belief that although inadequate treatment does not cause neurosyphilis, it does not prevent it.

Submitted May 18, 1938.

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The best time to treat a case of neurosyphilis is before the onset of symptoms. If a spinal fluid examination reveals a paretic formula, a high cell count, a positive globulin and a positive Wassermann or Kahn, the treatment of choice should be fever therapy, tryparsamide and a heavy metal. A spinal fluid examination is not complete unless all of the above mentioned tests are done. A cell count of over seven is regarded as suspicious while a positive globulin and a paretic gold curve is considered serious. A negative neurological examination alone is not reliable for spinal fluid signs frequently precede symptoms from the nervous system. Syphilis will attack any part or parts of the brain and symptoms will appear accordingly. It is not unusual to find paretics with a severe mental disturbance, yet show few if any neurological signs.

The best results are obtained in asymptomatic form of neurosyphilis. It would be dangerous to wait until marked mental and neurological symptoms appear before changing to tryparsamide and fever therapy. The majority of the cases admitted to the Columbus State Hospital are in the advanced stages. Histories show that some were not recognized early enough. Others received treatment prescribed for early syphilis even though mental and neurological signs were evident for months and occasionally years before admission. A few relatives who apparently did not understand the purposes, facilities and treatment afforded by the State Hospital, tried to care for the patient at home. They thought the hospital was the last resort. One case was kept at home, with the approval of the family physician, and without treatment for two years after he began to show mental symptoms. On admission he was found to be markedly demented. He led practically a vegetative existence. The relatives were told that in his present condition there was very little hope for cure and that better results could have been obtained had he been admitted to the hospital at the onset of symptoms. The family physician who had known the patient

for a long time, did not explain the situation to them and did not tell them that hopeless dementia and death are sure to follow unless treatment is started at any early stage. There are other histories similar in their content. A physician that does not understand a case should always call in a consultant.

The continuous form of treatment has been used on all male patients for the past four years. The aim is not to produce a serological cure, but to return the patient to society and enable him to become a useful member of the community. When a state of remission is secured, an attempt is made to continue the patient in such a state. Treatment is continued for two and in some cases for three years. Patients may go home on a trial visit in a few months if they seem mentally well but instructed to come back twice a week for treatment. If financially able to pay, they are sent to the family physician with report of the amount of treatment received and instructions concerning further treatment. Spinal fluid examination is done on all patients every six months during treatment. An effort is made to keep in touch with all remissions and have them come to the hospital once a year for an examination.

Artificial fever and tryparsamide have been found to be the most effective means of combating neurosyphilis. The most commonly used methods of producing fever are malaria, fever produced by electrical appliances, typhoid vaccine, rat bite fever and relapsing fever.

Tertian malaria is used most often, not only because it is easy to control, but because results compare favorably with other forms of producing artificial fever. Patients can be treated in general hospitals. It is unnnecessary to send them to the State Hospital as many physicians are inclined to believe. Hospitalization need not last more than three or four weeks.

A thorough physical examination will determine if the patient can withstand malaria, contra-indications are old age, cardiovascular disease, pulmonary tuberculosis, marked diabetes, severe anemia and kidney disease. Malaria is transmitted from one case to the next by withdrawing 5 cc. of venous blood and injecting it intravenously in the next case. The blood may be withdrawn at any time during the course of the disease. However, the best time is generally considered to be between the third and fifth chill. The incubation period is anywhere from six to twelve days. There may be an irregular elevation of temperature as high as 101° F. for three or four days, after that, distinct chills will follow. The chills usually occur every 36 hours and in a few cases every 24 hours. The number of chills depend on the individual case. Nine to twelve chills will be sufficient in the majority of cases. As few as two or three chills have been found to be beneficial. When to terminate the fever depends on the general condition of the patient. It should be terminated following a convulsion, for a convulsion may recur at the next temperature elevation. A red blood count of less than 2,000,000, or any renal or cardiac disturbance should also be considered as a sign to end fever. The intravenous injection of 0.6 gms. of neoarsphenamine or 10 to 15 grains of quinine hydrochloride will prevent the next chill. Malaria is usually stopped by giving 15 grains of quinine sulphate for three days, thereafter 7½ grains for two weeks. The fever has never recurred with such dosage of quinine.

Tryparsamide and bismuth sodium tartrate (aqueous solution) is given following the course of malaria. For about three years the tryparsamide was given at the same time as the fever. The results did not seem to be any different and reaction, such as convulsions, occurred more frequently. (Tryparsamide is a pentavalent arsenical synthesized by Jacobs and Herdelberger of the Rockefeller Institute in 1917. It has a strong tonic and resistance building power. It has a more penetrating power in the nervous system than other arsenicals and is also mildly spirochetocidal. Its use is limited to neurosyphilis for it is ineffective in early syphilis.) Tryparsamide is given intravenously at weekly intervals in 3 gram doses. The only contra-indication is optic atrophy. An ophthalmoscopic and visual field examination should be made on all cases. The patient is warned to report any eye disturbance. Trouble may be expected during the first 10 injections. Any visual disturbance due to the drug will improve in a few weeks after the drug is stopped. Tryparsamide when used intelligently is an essential part of the treatment of neurosyphilis and for the best results, 75 to 100 injections are advisable. The continuous form of treatment is preferred. A bismuth preparation is given between the tryparsamide injections.

CONCLUSION

The prevention of neurosyphilis depends on adequate treatment during the early syphilis. Inadequate treatment does not cause, but does not prevent neurosyphilis. The treatment as used at the Columbus State Hospital and found to give the best results, is given above.

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GOITER HEART

By JOSEPH L. DECOURCY, M.D., CINCINNATI, OHIO

IS THERE such a disease entity as "goiter heart?" This is a question which is often presented to the surgeon who does many thyroid operations. Frequently he is asked, or asks himself, Does thyrotoxicosis actually induce structural changes in a heart previously normal? Or does it merely put an added strain upon a heart already defective, which may then for the first time be in evidence?

The cardiac complications of goiter were among the first to be noted by the pioneers in the study of thyroid disease. Increase in the basal metabolic rate, which is the most striking manifestation of thyrotoxicosis, is the cause of the tachycardia—the most common heart disturbance noted in conjunction with enlargement of the thyroid gland. A rise in the metabolic rate demands a greater supply of oxygen. To obtain this the organism must send more blood to the lungs for oxygenation. Acceleration of the heart rate is the only way this demand can be met.

Hyperthyroidism is regularly accompanied by an elevation of pulse pressure, especially noticeable in the exophthalmic type of goiter. The usual explanation of these and the other phenomena ("heat flashes," sweating and abnormal heart sounds) which are the recognized symptoms of thyrotoxicosis is that elevation of the rate of metabolism reacts upon the cardiovascular system in such a way as to produce this acceleration of the heart beat and increased systolic blood-pressure.

Pathologic study of the hearts of goiter patients who have come to autopsy have not shed much light upon our problem. Though marked pathologic changes have often been found, it usually has been impossible to prove that they were the direct consequence of the thyroid intoxication. Hypertrophy, especially of the left ventricle, has been noted and recorded; but congenital anomalies, valvular defects or other cardiac lesions were generally present as well, making it impossible to tell with accuracy whether the thyrotoxicosis had any share in bringing about the structural defects or whether they were merely congenital or acquired lesions, the association with thyroid disease being largely accidental.

An analysis of the heart sounds reveals that the systolic murmurs over the heart region, heard best at the apex and at the third left intercostal space, are "blowing" in character and often show variations in their transmission. Though the systolic murmurs at the apex very probably indicate a relative mitral insufficiency, the facts that they can be only faintly heard when the subject is resting with muscles relaxed and are entirely stilled when the thyrotoxic condition has been relieved would suggest strongly that the murmurs bear a very intimate relation to the increase in the circulatory rate.

It also has been noted that, when an adenomatous goiter is present **without** thyrotoxicosis, the presence of essential hypertension is really a forewarning of the occurrence of hyperthyroidism. The coincidence of an enlarged thyroid, the characteristic symptoms of non-toxic goiter and hypertension can only be understood as making up a syndrome preliminary to the cardiac condition of which hypertension is a regular accompaniment.

The cardiac hypertrophy which may be termed the chief **secondary** heart complication of thyroid disease is in no way pathognomonic of goitre. X-ray examination will show a general rounding enlargement not characteristic of any one ailment. Often the electrocardiogram will be perfectly normal; but more frequently there will be evidence of pathologic conditions in the left ventricle, very exceptionally in the right ventricle. Cardiac weakness will cause dilatation eventuating in permanent enlargement.

Clinical observation, as well as pathologic study, has shown that the auricular fibrillation and flutter which are relatively common findings in thyrotoxicosis are transient rather than persistent in character. Transient fibrillation is often seen after thyroidectomy. In what is known as "post-operative thyroid shock," a tremendous acceleration of the ventricular rate will be associated with it. Such paroxysmal fibrillation probably depends upon some degree of myocardial injury. The persistent type of fibrillation, which can be relieved temporarily by medication but tends to recur when treatment is stopped, is undoubtedly the product of a definitely and permanently impaired myocardium. Transient fibrillation may be brought on by overexertion and is often observed by the patients themselves to be directly associated with some exacerbation of the toxicity of the goiter.

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Submitted June 24, 1938.

We have noted that among our patients auricular fibrillation is more frequent when the toxic goiter is of the diffuse nodular type rather than in the hyperplastic (exophthalmic) type. The only explanation we can offer for this is that in the nodular type the intoxication is gradual, the process in most instances, slowly increasing in intensity over a period of years. Patients suffering from this type of goiter are not often seen by the surgeon until the disease has been in progress for a long time. The average interval (as computed from our records) between the date the patient first noted the enlargement until operation was 16 years.

The hyperplastic cases, on the other hand, are far more fulminating. Because of the severity of the symptoms and the disability resulting from them, the hyperplastic goiter patient comes early for help. Our records average 16 months between onset and entrance to the clinic for this type of hyperthyroidism.

It is because these hyperplastic cases develop a symptom-complex which alarms the patients and his friends relatively soon after the inception of the disease that the operative results are uniformly better, notwithstanding the greater severity of the condition. A gradual enlargement of the neck with slowly developing thyrotoxic symptoms does not cause any special inconvenience to the average person. Social and economic considerations are likely to influence him against "going to the doctor." As time passes he becomes accustomed to the condition and so it is not until irremediable damage has been done to the cardiovascular system that a full realization of the gravity of the affliction is forced upon him. Such a patient will often be well on in the fourth, or even in the fifth decade of life, so that the "heart trouble" when it occurs in women is not infrequently considered a premenopausal manifestation and its real significance totally ignored.

When such a patient finally does come to the surgeon, he will be powerless to give the relief he could easily have afforded five, ten or fifteen years earlier. The hyperplastic goiter patient, on the other hand, by seeking early relief of hyperthyroidism by adequate surgery, will usually escape serious cardiac damage. It has been the experience of our clinic that auricular fibrillation, if of recent origin, disappears entirely after thyroidectomy and very seldom recurs. But if the fibrillation is of long standing, though it may disappear after operation, as soon as the patient undertakes any unusual effort there is likely to be a return of the preoperative symptoms.

Decompensation should not, however, be regarded as a contraindication to thyroidectomy. For years goiter surgeons have recognized this fact and realized that, no matter what type of thyroid disease is immediately responsible for the decompensation, it will be a benefit rather than a detriment to the heart condition to abolish the source of intoxication.

A number of my patients who had decompensation before thyroidectomy was done are now alive and in good condition for as many as 12 or 14 years after operation. For the reasons previously outlined, the type of thyroid disease will, however, have a decided effect on the patient's life expectation. If the thyrotoxicosis has been present for a long time, there probably will be such structural changes in the heart that it cannot carry on its functions for any great length of time. How many of these patients may have had structural defects in their hearts before the thyroid became overactive, we have no accurate means of gauging; but it is probable that their number is not inconsiderable.

On the other hand, there is a sufficiently large number of patients having decompensation before thyroidectomy who are permanently relieved of heart symptoms after operation to argue strongly in favor of the theory that there is such an entity as "goiter heart." This does not mean precisely the same thing as that seen in the endemic goiter regions of Europe, concerning which so much was said and written in the early history of thyroid disease. That type of "goiter heart" was formerly attributed to mechanical factors, such as compression of the cervical blood-vessels and the trachea, or to chemical factors—a special toxin supposed to be elaborated by the thyroid gland or the supposititious poisons which were held responsible for the over-activity of the gland itself.

These theories were, of course, largely abandoned when an understanding of the processes of metabolism became generally diffused among the medical profession. As no metabolic studies are available for these earlier cases, we have no means of knowing how important a factor mild hyperthyroidism may have been in the production of the cardiac state which was then called "goiter heart." At any rate, we now know that the thyroid deficiency seen so frequently in "goiter regions" can of itself, by virtue of its effect upon blood-pressure as well as upon the kidneys and the intima of the arteries, seriously affect cardiac function.

We have all probably had the experience, when examining for the first time a patient who has suffered for a long period from a slow-growing hyperthyroidism, of finding a normal basal metabolic rate but an abnormal heart rate. We have no means of ascertaining whether or not the metabolism was abnormal before the patient came under observation. Neither can we be sure, especially if the patient is a woman in middle life, that the hyperthyroidism which we now find is wholly responsible for such cardiac

abnormalities as are in no way distinctively due to thyrotoxicosis.

Myocardial disease is a relatively common finding at that age period, quite irrespective of thyroid conditions, being due to the vascular changes which then take place and for which we can assign no more exact cause than age. Notwithstanding, the evidence at present available strongly indicates that a persistent hyperthyroidism, even if the initial examination shows no thyrotoxicosis, is a potential, if not an actual, threat to the integrity of the heart.

CONCLUSIONS

Because so many patients who have auricular fibrillation before thyroidectomy are permanently relieved by operation, the conclusion that there is such a disease entity as "goiter heart" would seem justified.

The prompt performance of thyroidectomy prevents a functional disorder induced by thyrotoxicosis from becoming a structural heart lesion.

Although cardiac irregularities are not a contraindication to thyroidectomy, the postoperative life expectancy will vary in direct ratio to the time which has been allowed to elapse between the beginning of the heart injury and the time when the operation was performed.

Even though thyroidectomy apparently permanently abolishes auricular fibrillation and other cardiac irregularities accompanying thyrotoxicosis, such patients must be admonished to avoid all extra exertion thereafter and should be regarded as potential "heart cases" for the remainder of their lives.

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Importance of Rectal Examination

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The rectum and anus are the last to be examined by most physicians if not entirely omitted from the routine examination. This must be true otherwise we would not see so many inoperable carcinomas of the rectum. Carcinoma of the rectum is amenable to surgery if recognized in its early stage. Of course many of these well-advanced cases come to the doctor too late, but on the other hand histories of these patients will show that they have been under a physician's care for many months and have never had a rectal examination. Medical schools have omitted to a great extent any emphasis on rectal anatomy and as a result examination and inspection of this region has too often been neglected.

Since more than a third of all carcinomas of the alimentary tract occur in the rectum this is not a field to be overlooked. It is important that the early symptoms and signs of carcinoma of the rectum be known and recognized. The disease is insidious in its inception and may exist for several months before giving rise to symptoms. Careful inquiry into the patient's history may reveal that there has been some recent changes in bowel habits such as prolonged attacks of constipation which have been followed in one to several months by attacks of diarrhea in an otherwise healthy individual. Much attention should be given this point in the taking of histories because many cases give this definite history. After several months objective signs make their appearance. These may include excessive mucous secretion, bleeding, blood-tinged stools, discomfort after bowel action, sensation of fullness in the rectum, a peculiar offensive odor to the stool, vague pains in the region of the sacrum and more severe pains when the anal region is involved. No particular group of symptoms can be ascribed to all growths of the rectum because these vary with the location of the growth in the rectum whether it is in the anal canal, ampulla or recto-sigmoidal junction.

For the man making rectal examinations it is not necessary to own special examining equipment. The patient may be placed on a regular examining table either in the right or left lateral position. I prefer the right lateral position because this allows the recto-sigmoidal junction to fall downwards and toward the anus whereas with the patient on the left side the recto-sigmoidal junction tends to fall away from the examining finger. With the patient in this position the anal region is inspected. A well lubricated index finger of the left hand is then inserted gently into the anus noting the tonicity of the anal sphincter and other pathology in the canal. The finger is then swept around the ampulla in an attempt to locate any pathology that might be present. By following this one procedure alone many growths in the rectum may be detected. Of course, all pathology about the rectum is not of a carcinomatous nature but all bleeding should be considered a symptom of carcinoma until proved otherwise.

The neglect of this important diagnostic step is almost universal. During the six months which I recently spent visiting the leading rectal clinics in this country and England, I saw time and again patients with carcinoma of the rectum make their appearance in the clinic with accompanying letters from their family physicians. These notes invariably stated that the patient was suffering from some type of rectal pathology usually hemorrhoids or fissures and would the clinics please so treat them. In some of these cases the carcinoma was so well advanced that it was easily felt by the examining finger. If a rectal examination were included in all routine examinations I am sure that many of these inoperable cases could be detected in an early stage where surgery could be of value and thus add many years to the lives of these unfortunate individuals.

137 E. STATE STREET.

INSTRUCTIONS TO MOTHERS ON INFANT CARE

By JOHN W. LARCOMB, M.D., COLUMBUS, OHIO

THE earlier days of nursing find the mother and baby in bed. The breasts are first cleansed with boric acid or other mild antiseptic. Some prefer to follow this with a thorough sponging with sterile water. The mother now lies on her side allowing the breast to rest on the bed. The baby is brought up and placed on his side and the nipple inserted into the baby's mouth. The length of the nursing period should be about 20 minutes.

As the mother gains in strength and her obstetrician allows her to be about, the baby is nursed from her lap. The baby is placed on his or her back with head toward the side to be nursed and after routine cleansing of the nipple the mother leans over from her sitting position, inserting the nipple into the baby's mouth.

Occasionally a small amount of milk is regurgitated by the baby. This should not alarm the mother. The baby's stomach is possibly full and this excess is returned.

After nursing the breasts should be wiped off with sterile water and returned to their support until the next feeding. Occasionally it will be noted that the baby's lips are a little swollen and may appear to have a blister on them after nursing. This is generally due to not having enough of the nipple inserted into the baby's mouth causing more effort to be expended in sucking the milk, therefore more pressure about the infant's lips. Rarely is it caused by a shortage of milk.

FREQUENCY OF NURSING

For the first few weeks of life the three hour interval seems to be the best, six or seven feedings are given. Occasionally very small or premature babies are fed every two hours. At about the third month when the baby's stomach capacity has greatly increased the four hour interval may be started. Usually five feedings are given in 24 hours time. These may be 6 - 10 - 2 - 6 - 10 or 7 - 11 - 3 - 7 - 11. The baby dictates the start of his day.

There are times when the baby awakens before feeding time. The problem here is to know what to do—sometimes a few swallows of warm sterile water will tide her over. At other times the feeding may be started earlier than the schedule calls for.

Footnote—Too little attention is given to what instructions we shall give our patients and how we shall state them so that the chances for misunderstanding will be reduced to a minimum. The author of these instructions to mothers of infants has made a careful study of this problem for 12 years and now his progress to date is presented here at our request in the hope that others will find it helpful.—Editor.

The Author

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BOTTLE FEEDING

The bottle is warmed by placing it in hot water for a sufficient length of time, that the milk when shaken on the inner surface of the arm or wrist feels warm but not hot. There are several varieties of bottle warmers on the market. The Vanta is the cheapest and works as well as any of them.

Most babies are more easily fed on their backs, but a few do better on their side; both may be tried. The nipple is now inspected to see that the holes are open and the feeding is begun. If it is discovered that the nipple holes are stopped up they may be opened by first heating the "pin part" of an opened safety pin in a gas flame until red hot. Allow it to cool until the color has left, then stick it in the obstructed nipple holes. This quickly enlarges the hole.

It is well to remove the bottle now and then to allow air to enter the bottle from the nipple as a vacuum is built up in the bottle when milk is withdrawn through the nipple. Failure to do this fatigues the baby and he may either go to sleep on bottle or start to fret.

Some babies swallow air when they nurse. This swallowed air distends the stomach and the baby may stop nursing before the bottle is finished. To overcome this the baby should be held against your chest with her head over your shoulder. Now gently pat her back and the gas will be belched.

After the feeding, which takes up to 20 minutes, the baby should not be handled much or allowed to play for about 15 minutes. This allows part of the milk to start its journey through the alimentary canal, and by lessening stomach distension prevents regurgitation of milk.

PREPARATION OF THE FORMULA

(a) **Cow's Milk Formula**—Prescriptions for cow's milk formulae generally call for a certain number of ounces of whole milk and water. The

added carbohydrate (sugar) content is given in tablespoonsful. For babies under one year old and when the source of the milk or water is not known the entire formula should be boiled for three minutes. If the formula calls for the addition of egg yolk this should be added after the milk, water, sugar mixture has cooled after boiling, otherwise the egg will be cooked and float to the top of the formula and stop up the nipples. When orange juice is to be added it is better to do this also after the boil.

We now come to the bottling of the formula. Pyrex bottles should be used. The increase in first cost over other bottles is returned to you many times since they withstand boiling and with other bottles boiling accounts for most of the breakage.

Either small neck or large neck bottles may be used. It is more economical to use small neck bottles as the nipples are cheaper. The life of the average nipple is about a month, if sterilization by boiling is used. When the baby is small the nipples should be small. The size of nipple is increased as the baby's mouth grows.

A funnel is convenient to use in filling the bottles. When this is done the sterile nipples are fastened on the bottles and sterile glass bottle caps are pressed down over the nipple. The bottles are now placed in the refrigerator to keep until needed.

Every utensil used to prepare the formula should be sterilized by boiling or by steam. Steam sterilization prolongs the life of the bottles and nipples. The best method of steam sterilization is the use of a steam cooker. These are inexpensive and easy to use. It only takes 15 minutes to sterilize all of the bottles, nipples, funnel and bottle caps for the entire day's feeding.

(b) **Evaporated Milk Formula**—Since evaporated milk is twice the strength of whole milk you will notice that much less of it is used than whole milk. You will also notice that the amount of water added is much greater than when a whole milk formula is used. These formulae are best prepared by first boiling the required amount of water (better to add an ounce extra to account for evaporation), then when cool the measured amount of evaporated milk and sugar are added. The bottling is the same as for whole milk.

Most of the evaporated milk on the market is first class. I would be sure I were buying irradiated evaporated milk. Do not confuse condensed milk with evaporated milk as the former is not suited to infant feeding except under rare and special requirements.

(c) **Powdered Milk Formula**—The powdered milk formula generally calls for a certain number of tablespoonsful of the powder which is placed in the bottom of a sterile pan. To this the amount of extra carbohydrate (sugar) is added, then the amount of water (previously boiled) called for is slowly added while stirring. Some powdered milks, as prepared by the manufacturers, come with the carbohydrate (sugar) added. The formula as given by your physician will instruct you on this point. The formula is now bottled according to directions under paragraph "a".

ACCESSORY VITAMINES

It is advisable to give codliver oil, haliver oil, or one of the concentrates at the end of the first month. Do not put these products in the formula as a whole or in one of the bottles, as the oil will cling to the sides of the container and the baby will receive no benefit from it. This should be continued indefinitely. For the first year the best time to give codliver oil is at the time of the bath. If a little is spilled the clothing will not become stained. These stains are difficult to remove.

CEREAL

With the introduction of pre-cooked, finely divided cereal, it is now possible to begin cereal at the end of the third month or early in the fourth. This should not be put in the formula. It is best mixed with some of the formula in a cup and fed with a spoon. By the sixth month the coarser cereals may be given.

VEGETABLES

It is best to start with the prepared vegetables. One brand is sold in glass jars and seems to be most satisfactory. By the use of this brand the necessity of transferring the remaining portion from a can to a glass dish is not necessary. It is not important what vegetable you start with but they should be varied. Remember spinach sometimes makes the stools dark but does no harm. Carrots, when fed too often, sometimes give the skin a yellow cast called "carrotemia".

The vegetables should be given about half-way between bottle feeding either morning or afternoon. Soups prepared for babies may be given in place of vegetables.

MEAT

Scraped beef is probably the best to start out on. It may be given after the tenth month. Scraped beef is prepared by first searing a piece of steak, then with a teaspoon, or dull knife, scrape off enough to fill the spoon. The scraping removes the nutritive cellular matter and leaves the undesirable connective tissue. The scraped meat is now shaped into a patty and broiled.

BATHING AND CARE OF THE SKIN

The new baby is generally given its first bath soon after birth and ammoniated mercury (½ per cent) salve is applied to the entire body. This prevents impetigo which sometimes appears in

nurseries where a number of babies are cared for. This salve is applied after every bath as long as the baby is in the hospital. The temperature of the bath should be between 75 and 85 degrees, not over and not under. The soap used should be mild, a good grade of castile being preferred. If this is not available any of the soaps manufactured especially for babies are usually satisfactory.

Care should be exercised that no water get in the nose or ears. If the nose has a little mucus in it you may wipe it out with a cotton applicator. The ear canal should not be touched. The genitalia require no more care than washing. Do not wash deeply in the vagina of girl babies. In uncircumcised babies the foreskin should be retracted at the time the genitalia are washed.

After the bath one must be sure all of the soap has been washed off the baby's skin. The drying is best accomplished by using a soft bath towel. After drying, the baby's skin may be oiled with any of the oils made for this purpose.

In warm weather the folds of skin around the neck, and so forth, may be lightly powdered with borated talc or special baby powder.

SLEEP

For the first few weeks the baby sleeps most of the time. She should not be disturbed by anxious visitors but allowed to sleep from one feeding to the next. When she frets from one feeding to the next she may have colic, constipation or may not be receiving enough to eat. Usually a small warm water bottle at the feet aids colic.

For constipation an injection of an ounce of warm water with infant sized syringe generally relieves it. Your physician should be consulted about any increase in food.

DIAPERS

More important than the kind of diaper is the quantity. You should have at least 30 and preferably 40 diapers. The baby should not be allowed to lie in a wet or soiled diaper. Many cases of diaper rash can be traced to this error. The diapers should be washed as soon as practicable after their use. It is permissible to allow them to soak in water over night, then they should be washed and passed through two rinses, the last may contain one tablespoonful of boric acid. This is allowed to dry in the diaper. The object is to reduce the alkalinity of the baby's urine and inhibit ammoniacal fermentation in the diaper. This ammoniacal fermentation is responsible for the great majority of cases of diaper rash and allied dermatoses of the diaper area. If possible the diapers should be line dried in the sun.

CLOTHING AND BEDDING

The under clothing for the baby should consist of cotton under shirts, abdominal bands and cotton stockings in addition to the diapers. The abdominal bands should be used until the umbilical cord loosens itself, then they are of no further value. In summer stockings are not necessary.

The question of rubber pants merits a few remarks. They are permissible for short periods of time only, that is, not more than an hour at a time. Their use tends to favor the development of diaper rash.

The mattress should be of felt or spring. To keep the mattress from becoming soiled I think a full mattress size Knittex pad should be used. On top of this the cotton sheet is placed. In winter a light wool blanket is used. In summer a light cotton one is satisfactory. Blanket clips are an aid in keeping the child covered.

ATTENDANTS AND VISITORS

If a nurse or helper is to be employed to care for the baby, caution should be exercised in their selection. You should have satisfactory references submitted and you should insist on a careful medical examination and accounting of past sicknesses by your family physician. She should have had good training in formula preparation or be intelligent enough so that she will understand all of the steps in formula preparation.

The handling of the baby by visitors should be prohibited. The baby should not be brought in the presence of anyone having a cold or any sickness that might be contagious. Members of the family having colds should wear gauze masks when caring for the baby.

Careful watch must be kept over older brothers or sisters that they do not bring in friends having infections.

IMMUNIZATION AND VACCINATION

Every baby by the age of 10 months should have been vaccinated to prevent smallpox, and have taken "shots" to prevent whooping cough and diphtheria. The order in which these are given is not important. Since the mortality in whooping cough under one year of age is high I should prefer to give this immunization first, except in the presence of an epidemic of the other two. Typhoid immunization is generally not necessary at an early age unless the baby is to be taken abroad or on camping trips.

A List of 13 Diseases

Which Early or Late Ocular Syphilis May Resemble:

Rheumatic fever, tuberculosis, focal infection, gonorrhea, brain tumor, glaucoma, "pink eye," toxic amblyopia, Leber's disease, multiple sclerosis, orbital tumor, cerebral hemorrhage, retinitis pigmentosa.

Do a blood serologic test.—Supplement No. 5. Venereal Disease Inf. U.S.P.H.S.

ACUTE PERFORATION OF THE GALLBLADDER

By WADE W. STONE, M.D. and FRED M. DOUGLASS, M.D., TOLEDO, OHIO

IN a group of 268 cases of acute suppurative cholecystitis, 35 cases of perforation of the gallbladder were found and investigated. This is an incidence of 13 per cent, which happens to coincide with the figure quoted by Judd and Phillips[1], but is considerably lower than that reported by others, (Heuer[2], Zinninger[3], and Smith[4]). Such a percentage we believe is sufficiently high as to consider this complication whenever the presence of acute gallbladder is suspected. Too frequently the physician thinks of perforation of the gallbladder as a rarity, because his attention is drawn to the fact that its incidence in gallbladder disease in its chronic state is small, usually under 2 per cent (Eliason and McLaughlin[5]). Perforation of the gallbladder with its high mortality and sequelae is a problem so different than the non-ruptured suppurative gallbladder as to stimulate the treatment of the non-perforated case before its rupture. This same state of affairs exists between the chronic non-suppurative gallbladder and the acute suppurative gallbladder, to the extent that probably the real prophylaxis of the whole problem is removal of the infected gallbladder before it goes on to suppuration, to say nothing about perforation.

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OCCURRENCE AS TO SEX

As one would suspect, perforation of the gallbladder, like gallbladder disease itself, is more frequent in the female than the male. In our series, there were 22 perforations in females and 13 in males. Perforation of the gallbladder into the free abdominal cavity in a patient in the late stage of pregnancy has been reported by one of us[6].

AGE INCIDENCE

10 to 20 years	1 case
20 to 30 "	1 "
30 to 40 "	3 "
40 to 50 "	8 "
50 to 60 "	9 "
60 to 70 "	8 "
70 to 80 "	4 "
80 to 90 "	1 "

The average age for this group was 53, although perforation occurred in a child of 12 as well as in a person of 86 years.

SIGNS

The average temperature on admittance was 99°, although normal temperature is a frequent finding. Tabulation of cases is as follows:

98°	13 cases
99°	2 "
100°	7 "
101°	5 "
102°	3 "
103°	5 "

White blood counts averaged 13,800 although in two cases was the count normal. The highest count found was 25,000. Tenderness in the abdomen was noted in all 35 cases; in 31 cases was it limited to the right upper quadrant and in four was it generalized. The gallbladder was thought to have been palpated in 30 cases, a large tender mass in the right upper quadrant being described on physical examination.

Submitted June 11, 1938.

SYMPTOMS

A history of chronic recurrent gallbladder disease was present in all cases. This chronicity varied from several months to, in one case, over 50 years. The superimposed acute exacerbation was present for at least 12 hours and frequently had had its onset five to six days before seen by us. Pain was found in all cases and was the main reason for the patient summoning a physician. Nausea was not so constant a finding, being present in but 26 of the 35 cases. Vomiting closely paralleled the nausea, being noted in 24 of the cases. Jaundice was present in 11 of the cases and chills in but four cases.

PREOPERATIVE DIAGNOSIS

The diagnosis of perforated gallbladder is essentially that of acute suppurative cholecystitis in which the process is not subsiding or may even be spreading, depending on the presence or absence of the walling-off process. Diagnosis is made on the history of repeated gallbladder disease occurring in a patient suffering from pain in the abdomen, whose white count is elevated and whose fever is usually not high. There is a localized tenderness and mass usually in the right upper quadrant. One must differentiate the perforated viscus as duodenum, stomach, appendix, and acute intestinal obstruction, due to any cause. Flat X-ray plate of the abdomen is very helpful in ruling out this latter

condition, and of very little aid in establishing the diagnosis of ruptured gall bladder, even though stones have been seen in a few instances. The air bubble seen by the radiologist helps in differentiating the perforated ulcer of the stomach or duodenum from perforated gallbladder. In no case was it considered justifiable to subject the patient to a dye test of the gallbladder. This examination is not necessary to establish the diagnosis, and the time consumed is better spent preparing the patient for surgery. Nothing is done which will delay surgery.

PREOPERATIVE TREATMENT

As soon as the diagnosis is established, the next decision is when to operate the patient. In our experience, a delaying of the operation for three to four hours considerably lessens the risk. During this interval between diagnosis and surgical intervention, the patient is given large amounts of glucose and saline subcutaneously, and at the same time glucose is administered alone per vein; blood donors are procured, for transfusion is resorted to frequently as a postoperative treatment.

CHOICE OF ANAESTHESIA

Choice of anaesthesia depends entirely upon the patient's general condition. In the very sick or aged, local infiltration anaesthesia which precludes cholecystectomy, is the method of choice. In this series, 24 cases had straight nitrous oxide oxygen or cyclopropane, four were given a combination of gas and local anaesthesia, and three had but local infiltration anaesthesia. Curiously enough, the only case dying from bronchial pneumonia had cholecystostomy done under local anaesthesia. Since this series has been done, spinal anaesthesia is being used much more frequently, and we believe is undoubtedly the anaesthesia of choice, as it allows the operator to get down to the site of the suppuration easily without the attended load which deep gas anesthesia places upon the already embarrassed heart. We feel that our mortality would not have been so high had we been permitted to use spinal anaesthesia. Surely two of the deaths, and possibly four, which resulted from cardiovascular collapse, would not have occurred if this type of anaesthesia had been employed.

CHOICE OF OPERATION

Once again the patient's condition should be used as a yard-stick to determine whether the perforated organ should be drained or removed. If the patient's general condition is bad and the condition of the gallbladder such as to make its removal attended with too much shock, the simpler of the two procedures is done, although our records indicate that the morbidity is less when the suppurative organ is removed rather than drained. Twenty-two cases had cholecystectomy performed, the other 13 were drained. The incision employed in this group was a right rectus, but has since been replaced by the transverse because we feel that the incidence of hernia is probably less following the transverse approach. All wounds are drained and when there has been a contamination of the entire abdomen, suprapubic drainage in the male or vaginal drainage through colpotomy in the female is instituted. In recent years a small catheter for the introduction of cololysate is employed and we feel that the decreased morbidity justifies the employing of this lysin. Usually postoperative vomiting is less and distention not so severe or so constant, when cololysate is used.

PATHOLOGY

On opening the abdomen a large thick gallbladder with or without stones is noted, with an extravasation of bile and pus from the bladder itself. The site of perforation is usually in the goose-neck, but frequently is found in the fundus of the gallbladder itself. In eight cases, perforation had occurred in the absence of stones and in only one of these cases were there stones noted in the common duct. It is a common finding to feel a sharp edge of gall stone protruding through the gallbladder wall or to find stones free in the abdominal cavity. The important observation for the surgeon to make is to determine whether the perforated viscus has been walled off by one of the surrounding organs such as liver, colon or duodenum, or whether perforation has occurred into the free abdominal cavity. This factor helps in judging the outcome of the case. Acute free perforation of the abdomen presents a mortality two to two and one-half times greater than the walled off type.

POSTOPERATIVE CARE

All cases are treated as peritonitis; not only are fluids restricted by mouth, but the employing of a nasal tube with suction to keep the stomach empty is routine. Fluids are administered postoperatively in the same fashion as in advance of the operation, but at regular intervals. Blood chlorides are watched carefully and maintained at a normal level. The chest is inflated at regular intervals to prevent postoperative atelectasis and its accompanying pneumonia. The patient is made to breathe deeply at regular intervals between inflations. Stupes and morphine play the same role in this type of peritonitis as in any other, and as mentioned before, cololysate is given at intervals of every 12 hours. Very toxic cases receive whole blood slowly and repeatedly. Because of the age incidence at which this condition occurs, one must constantly think of the possibility of prostatic obstruction in the male and must be prepared to establish adequate drainage.

CONVALESCENCE

The average postoperative temperature was 101°. There was slight distention of the abdomen

with low grade ileus. The cautious use of prostigmin or pitressin is very effective in combating the distention. As soon as the distention has subsided, the patient is placed on a liquid diet rich in carhohydrates, and if enema is effective, a soft diet started.

COMPLICATIONS

Chest complications were noted in eight of the 35 cases, only three of which were true bronchial pneumonia; one of these died as mentioned before, following a cholecystostomy employing local infiltrative anaesthesia. Eight individuals were known to have some form of heart disease, usually hypertensive type, and five of the deaths were directly attributable to the failing heart which in two or more cases was made to suffer the additional load of a general anaesthesia. Eleven cases were noted with some type of kidney complication, most of which were cystitis or pyelitis, and had little or no bearing on the outcome of the case. Two cases of subphrenic abscess formation, one of which died 55 days following the original operation, occurred in this series. We are pleased to report the case of a very large intra-hepatic abscess which made a satisfactory recovery upon drainage of the liver. Sequelae: All wounds drained 17 days or longer and the drainage continued for a much longer period in the cholecystostomy cases than in those in which the gallbladder had been removed. Most of the wounds were considered to be secondarily infected and a follow up shows the incidence of seven ventral herniae. This number we believe can be reduced by the use of a transverse incision.

MORTALITY

Seven of the 35 cases died, five as the direct result of cardiovascular disease. One case in which there was a complication of a large subphrenic abscess terminated fatally, although drainage was effected. One aged individual died of bronchial pneumonia after apparently having weathered the peritonitis. This mortality of 20 per cent compares favorably with the series reported by others. The factors entering into this high mortality are those of conditions involving the heart and lungs, which one expects to find in individuals of 50 years of age or more. The routine use of spinal anaesthesia in those not too sick, we believe will help to reduce the mortality. The employing of local anaesthesia with drainage only of the gallbladder, still must be the only procedure permissible in the very sick. The crux of the whole problem as we see it is that of removing the gallbladder before it perforates, and this in turn reverts to the age old question of whether or not the gallbladder which is chronically infected should not be removed before it goes on to suppuration and possible perforation.

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Hemiplegia

The patient seized with a stroke as a result of hemorrhage should be placed in bed with head high and feet low. Ice caps should be applied to the head, hot water bottles to the feet. It is worth while, as an emergency measure, to give autohemic treatment, that is, to reinject into the gluteal muscles, twenty-five cc. of the patient's own venous blood. Movement of any kind is prohibited and to allay restlessness, morphine sulphate is the drug of choice. Catheterization may be necessary twice a day for a few days, the back must be kept dry and scrupulously clean to avoid "acute bedsores". The patient's position must be frequently changed to prevent hypostatic pneumonia and it is best to keep the patient lying on the opposite, healthy side to facilitate respiration and to prevent pressure damage to the paralyzed limbs. Purgatives are useful for splanchnic congestion. Cold milk for the first three days will suffice to maintain metabolism. If unable to swallow, a mixture of clear soup and milk can be introduced once a day by stomach tube. Avoid allowing these patients out of bed even though improvement occurs before the sixth week. They should be chair ridden for another two weeks and walking should not be attempted until a chronic picture of spastic hemiplegia is well established. Massage to the palsied limbs has no rational value, but its psychological benefits justify its prolonged application.

Thrombosis is more kindly to its victim in that it generally furnishes warnings in the form of ischemic attacks. There may be a slight loss of memory, a transient aphasia or a slight weakness in the arm or leg several days or hours before complete softening has developed. All this means a failing circulation in a given portion of the brain. Hence treatment should be quickly pursued in the direction of stimulating the circulation whether the vascular defect be arteriosclerotic or syphilitic. Hence we must endeavor to stimulate the heart, raise the blood pressure so as to discourage coagulation. Two tablespoonfuls of brandy or whisky and ammonia to the nostrils are useful emergency measures. The head should be lowered and the feet elevated. A hot water bottle to the precordial region is regarded by some as of special importance. Cathartics must be strictly avoided. Here digitalis is accepted as a indispensable cardiac tonic and can be given along with small doses (1/1000 gr.) of nitroglycerin.—Louis J. Karnosh, M.D., Cleveland; Jr. Kansas Med. Soc., Vol. XXXIX, No. 7, July, 1938.

A CLASSIFICATION OF TUMORS

Compiled by LAWRENCE A. POMEROY, M.D.
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With the assistance of the members of the staff of the Tumor Clinic

PART V.

TUMORS OF THE JAWS

The occurrence of tumors peculiar to the jaws, especially those tumors of dental origin, makes necessary the following classification. In addition the jaws may be the site of any of the tumors listed among "tumors of bone" (Geschickter)[15].

I. **Tumors of Dental Origin**
A. Radicular Cyst (Dental Root Cyst)
(lining of epithelium may be partial or complete)

B. Follicular or Dentigerous Cyst
(lining of epithelium, usually contains unerupted tooth)

C. Adamnationoma (solid or cystic)
(origin—undifferentiated basal cells, may approach type of squamous or enamel epithelium)
D. Odontoma (usually at site of unerupted tooth) (mixed tumor, contains derivatives of enamel epithelium and of connective tissue of dental papilla)

II. **Epulis**
A. Giant Cell Epulis
B. Fibrous Epulis

III. **Central Giant Cell Tumor**

IV. **Benign Osseous Tumor**
A. Osteoma
B. Ossifying Fibroma
Aberrant adamantinomas have been described in the ovary (teratoma in origin), tibia and hypophyseal duct (commonest solid tumor in this location).

TUMORS OF SKELETAL MUSCLE, Etc.

SECTION T

1. TUMORS OF SKELETAL MUSCLES (rare)

The classification of Stout[51] is used.

I. **Lipoma**

II. **Fibroma**

III. **Angioma**
A. Hemangioma
B. Lymphangioma

IV. **Giant Cell Tumor**

V. **Myositis Ossificans**
This lesion is probably the result of a metaplasia of the connective tissues, rather than inflammatory (Makrycostas) (Karsner)[25].

VI. **Rhabdomyoma** (benign)
Occurs occasionally in tongue

VII. **Sarcoma** (see Section U).
Various kinds may occur but liposarcoma and rhabdomyosarcoma merit special note.

VIII. **Secondary Tumor**
True blood-borne metastases in skeletal muscles are exceedingly rare (Willis)[58].

2. TUMORS OF JOINTS

I. **Osteochondroma**

II. **Polymorphocellular Tumor** (usually xanthomatous giant cell type)

III. **Fibroma**
IV. **Lipoma**
V. **Fibrosarcoma**
} Rare

VI. **Synovioma**

The origin is from synovial membrane, but connective tissue, tendon sheaths and lymphatics may be involved. May metastasize to lung. Often diagnosed fibro-endothelioma, malignant mesothelioma, spindle cell sarcoma, or fibrosarcoma (Coley,[7] Coley and Pierson[6]).

VII. **Secondary Tumor** is very rare (usual origin is lung).

3. TUMORS OF BURSAE

I. **Osteochondroma**
II. **Fibrosarcoma**
} Rare

4. TUMORS OF TENDON SHEATHS

I. **Osteochodroma**

II. **Ganglion** (cystic tumor of connective tissue origin)

III. **Polymorphocellular Tumor** (giant cell tumor, endothelioma, myeloma, "xanthosarcoma" are less accurate terms).

IV. **Fibroma**
V. **Lipoma**
VI. **Hemangioma**
VII. **Lymphangioma**
} Rare

SARCOMA

SECTION U

I. Undifferentiated Cell Type

A. Spindle Cell Sarcoma

B. Small Round Cell Sarcoma (rare)

C. Large Round Cell Sarcoma

II. Partially Differentiated Cell Type

A. Fibrosarcoma

B. Chondrosarcoma

C. Osteosarcoma

D. Myxosarcoma

E. Liposarcoma

With gross invasion and dissemination, the histological picture shows embryonic types of fat cells with multiple small fat globules and centrally disposed nuclei.

The liposarcoma of bone is highly malignant and may metastasize widely to soft tissues and bones (Stewart)[49].

F. Myosarcoma

G. Lymphosarcoma

It is to be differentiated from the extremely rare small round cell sarcoma in that the latter is likely to be an alveolated tumor, the cells of which are uniform in size, poorly vascularized and with little or no intervening reticulum other than the walls of the alveoli.

1. Malignant Lymphocytoma
2. Reticulum Cell Sarcoma (retotheliosarcoma)

H. Neurogenic Sarcoma

Quick and Cutler[40] have graded these tumors as follows:

Grade 1. Acellular, fibrous tumors composed of large spindle cells, lying in a dense stroma of hyaline fibrous material.

Grade 2. Cellular tumors composed of large spindle cells with very little intercellular substance.

Grade 3. Very cellular tumors composed of small spindle cells or polyhedral cells in a loose fibrillar network.

A large percentage of sarcomas of the soft parts are of neurogenic origin and possess the same gross and microscopic features and exhibit the same clinical course as do similar tumors in patients with one or more manifestations of von Recklinghausen's disease.

These tumors, on anatomical study, may or may not show definite nerve connection. Neurofibromas, plexiform or cirsoid neuromas, ganglionic neuromas, solitary neurogenic sarcomas, elephantiasis neuromatosa, nerve nevi, and melanomas are a closely related clinical-pathological group.

Extraperiosteal fibrosarcomata are frequently of neurogenic origin and associated with stigmata of neurofibromatosis.

The fundamental cell of origin of the tumor is the Schwann cell. The lamellar sheath contributes to certain of the tumors. (Stewart and Copeland)[47].

THE LEUCEMIAS (OR LEUCOSES), HODGKIN'S DISEASE, LYMPHOSARCOMA

SECTION V

I. Lymphoid Leucemia (Leucosis)

A. Acute
B. Chronic
} either form may be aleucemic

II. Myeloid Leucemia (Leucosis)

A. Acute
B. Chronic
} either form may be aleucemic

III. Monocytic Leucemia (Leucemic Reticulocytoma)

IV. Rare Forms of Leucemia (Leucosis)

A. Lymphosarcoma Cell Leucemia

B. Plasma Cell Leucemia

C. Eosinophile Cell Leucemia

D. Basophile Cell Leucemia

V. Hodgkin's Disease

VI. Lymphosarcoma

A. Malignant Lymphocytoma (Lymphatic Leucosarcoma)

B. Reticulum Cell Sarcoma

MISCELLANEOUS

SECTION W

1. BRANCHIAL REMNANTS

I. Branchial Appendage

This is a nipple-like mass of skin and subcutaneous tissue which projects from the side of the neck at the site of closure of the old cervical sinus.

II. Branchial Fistula

This may be a complete, a blind internal, or a blind external fistula.

III. Branchial Cyst

This is lined by stratified squamous epithel-

ium and usually contains epithelial debris and cholesterol crystals.

IV. Branchial Carcinoma

This tumor is commonly composed of squamous or transitional cells with little or no tendency toward keratinization or pearl formation but with a marked tendency to form masses with central necrosis of cells, giving rise to cavities lined by tumor cells (Stout)[51].

2. TUMORS OF CAROTID BODY

I. Phaeochromocytoma

This term, and not perithelioma, is correctly applied to most tumors of the carotid body, which is part of the sympathico-chromaffin system.

3. CHORDOMA

This rare tumor arises from misplaced remnants of the notochord and is found in the skull near the base, in the region of the cervical vertebrae and near the coccyx. Careful gross and microscopic study is necessary for the diagnosis, since myxochrondroma and mucinous carcinoma give somewhat similar microscopic appearances. (Karsner)[25].

4. ENDOTHELIOMA

At one time there seemed little doubt that numerous tumors might properly be classified as endotheliomata, but later studies have identified several of these as of other origin, so that the group is growing smaller. (Karsner)[25].

There is little doubt that genuine tumors of the reticuloendothelial elements of lymph-glands do occur, but the great majority of cases reported as such can not be accepted. No tumor is entitled to this designation until the possible existence of an unsuspected latent carcinoma has been excluded by thorough autopsy. Yet the literature abounds in records of "endothelioma" diagnosed from operation specimens or from biopsy fragments. (Willis)[58].

The perithelioma is a tumor which shows sheath-like growth around blood or lymph vesvels, supposedly derived from the perivascular endothelium or from clasmatocytes. There is no adequate support for this view, and the peculiarity of arrangement is probably due to nutritional necrosis of those parts of the tumor not near the vessels. (Karsner)[25] (Ewing does not agree).

5. GLOMUS TUMOR

Neuromyo-arterial Tumor.[52]

This is most common in the nail bed but may be found in other locations. It was formerly diagnosed as angiosarcoma, perithelioma or painful subcutaneous tubercle.

6. HYGROMA COLLI CYSTICUM

The cystic Hygroma of the neck is a cystic form of lymphangioma.

7. THYROGLOSSAL DUCT

I. Cyst

A. Mucous Cyst (lined by ciliated cells) Thyroid tissue may be found in the walls.

B. Dermoid Cyst

II. Carcinoma

Squamous cell carcinoma of the thyroid gland is thought to arise from the thyro-glossal duct.

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TUBERCULOSIS ABSTRACTS

A Review for Physicians Issued by the National Tuberculosis Association and Distributed by the Component Society, the Ohio Public Health Association

SOME FUNDAMENTALS IN TUBERCULOSIS PREVENTION

The importance of general resistance was well established before tuberculosis was known to be a germ disease; widespread tuberculosis was found associated with poverty; better living conditions provided some measure of protection.

Therefore in a community where the disease is epidemic, and where the tuberculosis death rate is high, a good standard of living is excellent general treatment.

However, this has its limitations: it does not prevent infection. It gives inadequate protection to the non-resistant and cannot protect even the resistant against large and frequent doses of infection.

In areas where the death rate is low and infection no longer inevitable it is giving way to more direct measures aimed at the infectious nature of the disease.

Sanitation—The anti-tuberculosis program has since its inception stressed sanitary education and undoubtedly infection has been reduced as a result.

Nevertheless the protection conferred by sanitary habits is in a practical way also limited. It is acquired after long and intensive practice is maintained at the price of eternal vigilance and is subject to human error.

Elimination of Infection—Perhaps the greatest benefit conferred by the modern sanatorium movement is not the lowering of the death rate by cures but the lowering of the infection rate by segregation and isolation which has perhaps given us the key to the ultimate control and eradication of this disease.

Unlike the acute respiratory diseases which depend for their spread on many cases being infectious for a short period, tuberculosis is a more slowly developing infection and gives much more time to isolate it.

Isolation is now the most effective measure for the control of tuberculosis but in order for it to be effective there must be (1) ample bed accommodation, (2) the removal of financial barriers to treatment without flavor of charity, (3) the most efficient treatment procurable provided for all, and (4) institutions sufficiently comfortable to be acceptable to patients for indefinite periods.

Vaccination—Any assistance that could be secured from even a relatively successful prophylactic would be of great help and we should be open minded with regard to BCG.

Epidemiological Studies—As the death rate declines programs must become more selective, concentrating on those groups where infection is heaviest and which can only be determined by continuous epidemiological studies in the area under control. Such studies indicate the strength of the enemy, the location of concentration or weaknesses, and provide information for a plan of attack.

More Careful Sifting of Contacts and Suspects—The clearing up of infection depends in many cases on the interest and energy of the family physician.

Where the incidence of infection is low and where the people are tuberculosis-conscious, the next step appears to be the supplying of free tuberculin to the family physician and his familiarization in its use as an aid in case selection.

Unidentified Spreaders—The greatest difficulty in clearing up tuberculosis is the infectious person with good tolerance who may spread the disease for years before falling sick. These persons appear to account for more than half the new patients admitted to sanatoria even where an advance program is applied.

How to identify the near-well, chronic spreader, infectious, but not sick enough to report to a doctor, is the difficult problem in tuberculosis epidemiology.

One simple suggestion toward its solution is a more general use of sputum examination by the family physician.

It is not too much to expect that the family physician should take the responsibility of having the sputum of chronic coughers in his practice examined for tubercle bacilli.

There is perhaps no case-finding procedure a physician can follow which will yield higher returns for the same effort.

Sputum examination of chronic coughers would succeed in measurably reducing infection from now unidentified spreaders.

Follow-up of Ex-Patients—No program is complete which does not give due consideration to the re-examination of all ex-patients for an average period of four years after discharge. This re-examination is not only for the purpose of advising and assisting them to attain the greatest possible degree of recovery but is also for the purpose of picking out cases which become active and infectious and which require further treatment for recovery and segregation for prevention of infection.

Case Registration—The greatest flaw in the

armor of anti-tuberculosis work today is failure to accomplish adequate case registration in the absence of which systematic follow-up of either ex-patients or contacts is impossible.

Registration cannot be achieved by legislation alone and as a statistical effort alone will fail. It must, to be successful, include an active follow-up service which provides advice, examination and treatment if necessary for patients and their contacts.

Tuberculosis-Consciousness—A fundamental of the anti-tuberculosis program upon which in the end all other tuberculosis activities depend is the tuberculosis-consciousness of the people.

The ailing individual must initiate the first step and come to the doctor.

When will he come? If he comes only on falling sick the great majority will come in an advanced stage of the disease; if on suspicion of early disease a large proportion will come in the early stage. How can he come on suspicion unless he has been taught to suspect tuberculosis?

While health officers, health nurses, family physicians, clergy, ex-patients, radio and press can accomplish a great deal, the responsibility could be shared with many thousands of fully trained teachers and "There appears no reason why health cannot be taught in school as successfully as can the three R's".

In a tuberculosis-minded community with modern facilities for diagnosis, tuberculosis can be diagnosed early enough and isolated early enough to reduce the spread of infection so rapidly as to convince us that it can be controlled and eventually reduced to a very minor cause of death.—R. G. Ferguson, M.D. From the Canadian Public Health Journal, May, 1938.

Tuberculosis of the Myocardium

Tuberculosis of the myocardium is of three types:

1. Tubercles, single or more, in size from a pea to a goose egg, may project beneath the endocardium or pericardium or be buried in the myocardium. They are firm, whitish masses with caseous centers.

2. The miliary type consists of grayish, semi-transparent masses which project as slight elevations beneath the endocardium. These are found most on the ventricular wall.

3. The third is the diffuse form which consists of a general tuberculosis of the pericardium.—Edward Podolsky, M.D., Brooklyn, N. Y.; W. Va. Med. Jr., Vol. 34, No. 7; July, 1938.

That physician will hardly be thought very careful of the health of others who neglects his own.—Rabelais.

Analgesia During First Stage of Labor*

In this series of 755 obstetric cases, Ruch has reported on the effects of a combination of dilaudid 1/32 grain and scopolamine 1/130 grain used for first stage analgesia. Also, an analysis was made of the possible effect of ethylene, nitrous oxide, ether and other drugs used for second stage anesthesia on the condition of the baby.

By far, most of the mothers obtained good analgesia from the dilaudid-scopolamine combination. Apnoea in the infants was of no great consequence in most cases, as they responded to minor resuscitation procedures, such as rubbing of the back, thumping of the feet, and began to breathe very quickly after mucus had been removed from the throat. The incidence of asphyxia was slightly greater when ether was used for second stage anesthesia. The only cases of deep asphyxia (three in all) which occurred followed the use of the latter anesthetic. There were three stillborn babies, one of which had an intracranial hemorrhage following a rapid second stage in a multipara; the other two were stillborn as a result of a prolonged period of "molding" in primiparae.

Several of the babies were X-rayed on the second day of life to determine whether or not they had an enlarged thymus gland. Some of these mothers had entered the hospital too late for semi-narcosis, but others were included in the series. In the 378 cases examined by X-ray, it is found that atelectasis was present in 24 of the babies, but only one of the babies showed any active symptoms. The lungs were completely expanded at the end of three to five days in all except four or five babies. Several of the babies who showed slight atelectasis in the X-ray picture were from mothers who had no semi-narcosis during the first stage.

"In a series of 755 cases, 1/32 grain of dilaudid and 1/130 grain of scopolamine proved to be a satisfactory combination for the production of semi-narcosis during the first stage of labor, providing a pleasing analgesia for the mother with little, if any, effect on the baby. In some cases a small dose of one of the barbiturates was administered in conjunction with the dilaudid-scopolamine analgesia. When ethylene or nitrous oxide was used for anesthesia in the second and third stages, apnoea occurred in only 4.2 per cent of the babies. With ether, respiratory difficulty was encountered more frequently."

Ruch, Walter A.: Analgesia during the First Stage of Labor. Am. J. of Obst. & Gyn., 35:830-834, (May) 1938.

With a fixed specific gravity of the urine of 1010 a urinary output of about 2200 cc. is necessary in order to remove body waste. Fluids should be forced as in azotemic nephritis, carefully observing the status of the circulation, not to over-burden it.—M. L. Gottlieb.

CASE RECORD PRESENTING CLINICAL PROBLEMS

Prematurity

By HARRY L. REINHART, M.D.

Case Presentation: Dr. Estelle T. Milliser:

AN 18 year old negress was admitted to the hospital in labor with a diagnosis of transverse presentation. She was immediately delivered by version and extraction of a living, but tiny premature male baby. It was difficult to estimate the exact extent of the pregnancy as the mother had been delivered of twin male babies 8½ months before, and had not menstruated since then. She thought she felt fetal movement three months prior to this delivery. The antenatal age of the infant was presumably between 6½ and 7½ months.

The baby was neither weighed nor measured following its birth, but wrapped in cotton and placed in an incubator. Beginning two hours after birth 10 drops of whiskey in 2 drams of distilled water was administered every three hours. Constant administration of oxygen and repeated doses of coramine in half ampule amounts were given for the marked and persistent cyanosis. About 18 hours after birth the weight was 688 grams (about 1½ pounds). By the end of the first day a beta lactose formula was added to the whiskey and water; the feedings were administered with a medicine dropper every two hours. Three days after birth breast feedings were instituted. There were frequent cyanotic spells which were treated with oxygen and metrazol. In addition to the breast milk the baby received a half a dram of an alcohol solution diluted 1 to 10 before each feeding. At one month of age the baby's weight was 1183 grams (about 2 pounds and 6 ounces).

The feeding of the infant during the second month was changed to a Similac formula, of which he was given 1½ ounces every three hours. His weight at two months of age was slightly over three pounds, and alcohol, oxygen and other medication were not required.

About this time (two months of age) he began vomiting and crying apparently from pain. The abdomen was distended and the right scrotal sac was enlarged and tender. He had passed no stools for 12 hours. The next day the abdominal distention had apparently increased and loops of bowel were apparent through the thin abdominal wall. There was a large mass in the right groin which was tense, hard, tender and irreducible. A diagnosis of a strangulated right inguinal hernia was made and an emergency operation was performed with a minimal amount of drop ether anesthesia. At operation "the bowel was purple in color and its surface dull, but 15 minutes after relief of the strangulation, the bowel had partially returned to its normal appearance. Resection was not indicated. The testicle was purple to black in color and showed no signs of returning to normal color. Because of the persistent black appearance of the testicle, it was removed with the hernial sac".

The infant's condition following operation was critical. Cyanosis was marked and a Cheyne-Stokes type of respiration prevailed. Oxygen was administered constantly and a clysis of 50 cc. of saline was injected beneath the skin. His temperature rose to 101.4° in the evening. The most pertinent problem in the postoperative care was the question of when to resume feeding by mouth. Manifestly this tiny premature, poorly nourished, dehydrated baby, two months of age and weighing three pounds needed food. On the other hand he had just undergone a major operation for a strangulated inguinal hernia. After careful consideration it was decided to resume feeding cautiously about six hours after the operation. During the next 24 hours, ½ ounce of the Similac formula was given every three hours. This was taken well and shortly after the first feeding the patient passed a soft yellow stool containing some blood. Subsequent stools were normal. On the following day 50 cc. of saline and glucose were given by hypodermoclysis morning and evening. His temperature and the respirations remained normal and his general condition was improved. After 24 hours the Similac formula was increased to 1 ounce per feeding which he took well. The third increase in the amount of his feeding placed him on his full preoperative schedule of 1½ ounces of the Similac formula every three hours, and haliver oil and viosterol, in less than 60 hours after his operation. Orange juice was later added to his diet. His weight one week after operation was 3 pounds and 7 ounces.

Three weeks later (about three months of age) he developed a snuffling type of respiration, cold extremities and vomiting. He had neither fever nor an increase of his respiratory rate. An X-ray examination of the lungs revealed a diffuse bilateral mottling, which supported the clinical diagnosis of broncho-pneumonia. He was treated by the application of heat, careful nursing and general supportive care. Ten days later recovery was apparently complete and his weight was 4 pounds and 10 ounces.

During the following week a moderately severe diarrhea of seven to eight semi-liquid stools a day developed. He was afebrile. The formula was at once changed to protein milk. By the end of the week the diarrhea had ceased and the baby was again on a regular formula of 3 ounces every three hours. He lost 5 ounces in weight during this episode. He was doing fairly well during the next week, when suddenly he began vomiting all his feedings and his temperature rose to 101.4°. All food was withheld for 12 hours and then a dilute formula was administered and gradually increased in strength and amount. He had no further vomiting.

At the age of four months he weighed 4 pounds and 14 ounces. A four hour feeding schedule was instituted, 4 ounces of formula was given at each feeding, and cereal was added to his diet. His improvement was steady and at five months of age he weighed 6 pounds and 12 ounces or more than four times his birth weight. He was discharged from the hospital at this time.

Subsequent history: At nine months of age, he weighed 11 pounds and 6 ounces. He was sitting up alone at six months of age and appeared about the same as any other infant of this age, although he had not begun to cut any teeth. His

This is the thirty-second of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

general condition since his discharge from the hospital had been "good except for occasional colds".

An interesting similar case of a premature infant with a birth weight of 735 grams was reported in the *Journal* of the *American Medical Association* of January 22, 1938, with a brief but pertinent review of recently recorded cases of very small infants, who have survived the first year of life. Therein it is stated that "the smallest infant for whom a complete report appears in the literature weighed 600 grams at birth and 540 grams after three days". In studies of the viability of premature infants 1,500 grams is usually regarded as the border zone, since statistics reveal the mortality to be about five times greater in those under 1,500 grams. The frequency of abnormal presentation of premature infants is well known. The factors which may have been responsible for the onset of premature labor of the mother in this case was not elicited.

Discussion—Dr. Reinhart:

Dr. Milliser has presented a very interesting and unusual case as well as one which challenges careful consideration. The successful outcome as a result of the management of this case is a tribute to all who participated in the care of the infant.

Pathologists so frequently encounter the other side of picture without demonstrable pathological lesions that they are intrigued by cases of this type. Certainly from the data available, and on the basis of acceptable criteria, had this infant died in the first few days of life, and an autopsy revealed no demonstrable pathological lesion a diagnosis of "non-viable due to prematurity" would have been considered justified. The diagnosis of prematurity should not be based on the weight alone, as weight is not necessarily synonomous with maturity. The most valuable information is the actual age of the fetus. As in this case, such information is often unavailable. It may then be desirable to make a more accurate estimate of the degree of prematurity, by the judicious collection and utilization of all related data available. For example, the 688 grams weight of this infant is comparable to that of the average fetus at about 6½ lunar months. The length of such a fetus is about 14 inches, and ossification centers are usually apparent by X-ray in the calcaneus and astragalus. About the end of the seventh lunar month the length of the average fetus is 15 inches and the weight 1,200 grams. The skin is covered with vernix caseosa and the lanugo has disappeared from the face. Hence, if comparable data were available we should probably be able to more accurately judge the antenatal age of this infant. The accumulation of accurate data of premature infants who live particularly for one month or longer is of importance in connection with the solution of the problem of viability of premature infants. Although the individual problem may be of nursing care occasionally, we know that other things being equal the infant's chances of survival increase the nearer it approaches full term. The logical point of attack for the reduction of the death rate in this type of case would seem to be in the prevention of prematurity. While the statement of a problem does not solve it, a more intelligent approach to the solution is made available. Good antepartum care is an aid in the reduction of deaths of new born infants, and modern investigations suggest that progestin and vitamin E may be of some value in the prevention of the premature onset of labor.

We also need more accurate data concerning the cause of death of new born infants. Even with good autopsies the largest group of cases are those in whom there is no demonstrable pathologic lesion. Most of the deaths of infants within the first two weeks of life are due to conditions which existed before the infant was born. In general these conditions are diseases of the mother, conditions which interrupt or impair placental circulation, and complications of pregnancy or labor. A good obstetrical history in which these factors are carefully evaluated in conjunction with a thorough autopsy will provide more accurate vital statistics and assist in clarifying this aspect of the problem.

Air Conditioning

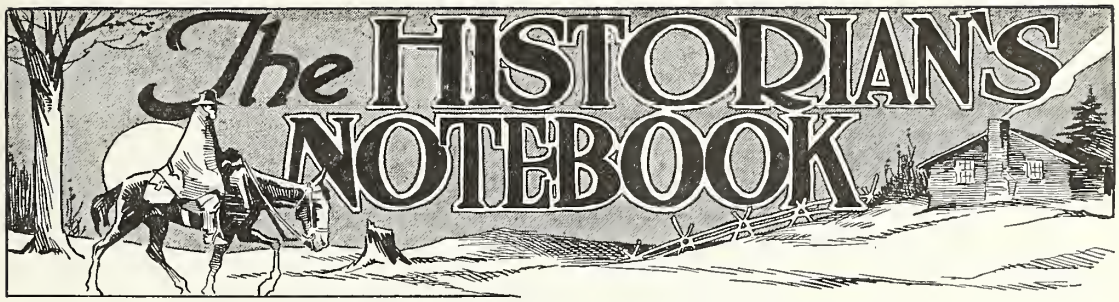
For general comfort conditions, the temperature should be kept 10 to 15 degrees below the outside temperature in summer, with from 50 to 55 per cent relative humidity. Rooms for arthritis should have 80 to 85° temperature, 35 to 30 per cent relative humidity; for tuberculosis, 68° temperature and 40 to 50 per cent relative humidity; for common colds and respiratory infections, 70 to 72° temperature, with around 55 per cent relative humidity.

Air conditioning is espeically benefical in all respiratory infections and diseases, cardiac conditions and for general comfort of patients.

Air conditioning is found of special benefit and recommended in nurseries, operating rooms, anesthetic rooms, recovery rooms, preventing postoperative heat stroke, oxygen therapy rooms, fever therapy rooms and diagnostic rooms.

All respiratory patients placed in air conditioned rooms have shown a much more rapid and satisfactory recovery, and no patient placed in air conditioned rooms has developed any colds or other respiratory affections.—R. E. Windham, M.D., F.A.C.S., San Angelo, Texas; Texas State Jr. of Med., Vol. XXXIV, No. 3; July, 1938.

Love, But Love Wisely: Sex is a flame which uncontrolled may scorch; properly guided, it will light the torch of eternity.—Fetterman.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

REUBEN DIMOND MUSSEY, M.D.—L.L.D. 1854

June 23, 1780—June 21, 1866

By DUDLEY W. PALMER, M.D., CINCINNATI, OHIO

He has passed beyond the mist
That binds us here
Into the view and larger life
Of a stimulating sphere.

BIOGRAPHY has long been considered one of the most fascinating branches of historical study because it brings to the mind as a stimulant the difficulties with which the older generations had to contend, the workings of the laws of cause and effect. Are not their wonderful accomplishments a stimulant to greater deeds today? The life of a great surgeon is full of pathos, triumphs, and anxieties; of the need for boldness, courage, skill and gentleness in the handling of the most elemental of human instincts—self preservation. It is the holding of human life in one's hands. A great surgeon is one whose intellectual resources are independent of technical equipment, rules of tradition or convention. He must do the correct thing instinctively, before his mind has had time to analyze the problem or the conquering perplexities and unclassified contingencies that know no rule of thumb. Most anyone can attain skill but judgment is God given.

Cincinnati counts among its great medical men Reuben Dimond Mussey. In his time he was said to have as great an obstetrical experience as any man in America. However he was better known as a surgeon than as an obstetrician, and was one of the most learned and distinguished adopted sons of our Buckeye state.

Mussey was born in Rockingham County, New Hampshire, inheriting the love of medicine from his father, Dr. John Mussey. The family moved to Amherst, New Hampshire, when he was a child. There he went to a winter district school. As the family was short of means he spent long hours on a farm or in teaching to earn enough money for the necessary tuition fees to finish his education. His father taught him Latin. At the age of 15 he entered Aurean Academy at Amherst and at 21 he entered the junior class of Dartmouth College graduating in August, 1803.

The Author

● Dr. Palmer is a graduate of Medical College of Ohio, Cincinnati, 1906; member American Surgical Association; American College of Surgeons; professor of clinical surgery, University of Cincinnati College of Medicine.

As a young man he enlisted in the Vermont Militia and served in the Indian Campaign where he saw a surgical operation. This increased his interest and confirmed his desire to become a surgeon. Encouraged by Dr. Josiah Goodhue, a local surgeon, he started to study medicine under Dr. Nathan Smith as his preceptor, the founder of the Medical School of New Hampshire. In 1805 young Mussey obtained the degree of Bachelor of Medicine from The Medical Institute of Dartmouth College. Harvard gave him an honorary A.M. degree in 1806. He began his practice at Ipswich, now Essex, Massachusetts. In three years becoming dissatisfied with his progress, the quality and extent of his training, he went to Philadelphia. There as a pupil of Benjamin S. Barton, he took lectures on botany and medicine, earning the degree of Doctor of Medicine in 1809 from the University of Pennsylvania which was the mecca of medical students of that time. In 1812, Dartmouth College also honored him with the degree of Doctor of Medicine.

He came in contact with well known medical men, such as Drs. B. Rush, Phillip Physick, called the father of American surgery, Barton, Woodhouse, and T. C. James, the first lecturer on

midwifery. They stirred him greatly. He was a hard worker and an indefatigable student who did not believe all he was told. One of the lecturers had said there was no absorption from one's skin. Mussey did not believe this statement, so to test it he took a bath in water in which he had dissolved "three pounds of madder". This coloring matter appeared in his urine, thus proving his point so that he made it the subject of his thesis, "Skin Absorption". The function of the skin became for a time his great interest and the subject of many original and ingenious experiments. As a student and doctor he gave great attention to details; as a surgeon he was slow and cautious, as a man he was sincerely religious, praying "with and for his patients". He defined gratitude as the "memory of the heart".

He practiced in Salem, Pennsylvania, for about five years as an obstetrician as well as a surgeon. In 1814, he was made professor of Theory and Practice of Physics in the Medical School of Dartmouth College. He lived in Hanover, N. H., for 25 years, holding at one time or another every chair in the Dartmouth medical school. During one of these years he also gave a course of lectures on chemistry, at Middlebury, Vermont. Not until 1819 was he made professor of Anatomy and Surgery at Dartmouth thus reaching his heart's desire. Some time later he was succeeded by Dr. P. S. Conner who also followed him to Cincinnati as professor of surgery. Conner said of him "but few men in our country impressed students and practitioners, as did Dr. Mussey; of untiring energy, a diligent student, a careful investigator, a bold operator, a strong teacher; stern, uncompromising, he was professionally and morally a power in those days".

From 1824-1834 he was president of the New Hampshire Medical Society, continuing his desire to learn more and realizing that there is always more to be learned somewhere in the world. In common with all great men Dr. Mussey was always a student. He visited for ten months, in 1829, London and Paris to see what had been accomplished to prolong lives and free the people from their physical handicaps. (Do we not still have too many doctors who rest quietly without progress coming from additional effort?) He was professor of Anatomy and Surgery at Bowdoin College from 1831 to 1935. His ability being soon appreciated over wide spreading parts of the east and middle west he was called to lecture at the Medical School of Maine; in 1836-37 at the College of New Hampshire and for two years to Fairfield, New York, at the College of Physicians and Surgeons.

Offers were made calling him as the Professor of Surgery of three prominent medical schools in 1838. He chose The Medical College of Ohio as the school west of the Alleghenies most needing him and also, it is said, because of the warmer climate of Cincinnati. The school was about on the verge of collapse in 1837 due to the wrangling of many inferior professors. A large part of this trip he made by canal to Pittsburgh and to Cincinnati by boat down the Ohio River. For 14 years he was the leading surgeon of the school, also having charge of the Marine Hospital. It was during this time the new fields of bacteriology and anaesthesia (in 1846) were brought to light, by Morton, an American dentist, which made possible the growth of successful surgery. In 1848 he reported 16 operations under chloroform without any "unpleasant symptoms". In 1847, Dr. Mussey was admitted to The Ohio Medical Society and in 1850 he was honored by being made the fourth president of the American Medical Association.

Dr. Mussey was a pioneer on both sides of the Atlantic Ocean, in several operations. His first remarkable operation was the successful ligation of both carotid arteries for aneursymal tumors of the scalp. He also made one of the earliest operations for ovarian disease. Great honor must be given him for the removal of the tongue of a thirteen year old boy, which measured eight inches in circumference. In October, 1837, he made the second operation on record in removing a shoulder blade and collar bone because of osteosarcoma. He antedated Sims in the successful surgical treatment of vesico-vaginal fistula, and performed lithotomy 49 times with but four deaths. Dr. Mussey was the first doctor to show that a bony union could take place in intrascapular fractures of the humerus. On his trip to London he took a specimen with him to show to Sir Astley Cooper who doubted that the bone had ever been fractured. Dr. Mussey told of this as an example of the bigotry and intolerance of many of the medical profession. Following his resignation from the Medical College of Ohio in 1859 he was chosen, in a few months, as the Professor of Surgery of Miami Medical School which he had helped found in 1852. The surgical wards of St. John's Hospital were placed under his control for six years. Upon his resignation from active practice at the age of 80, he went to Boston, living with his daughters, until he died in 1866.

Dr. Mussey was deeply interested in the political affairs of his time no matter whether they be of his city, county or state. Showing a clear view of what were the best interests of the country and his clientele he was led to make many adddresses at public meetings. It is said he showed this devotion to his country with his life's blood as did the men at Bunker Hill. To quote him "Take the stand, in regard to public affairs in your community, that your education qualifies you to take; give your influence freely to that part you deem right. When all educated men, the clergy and the medical profession

join the profession of law in giving suitable and dignified expression to their views on public matters all will go well with the republic." (Is not this still true in 1938?)

Dr. Mussey showed great generosity to the poor through his loyal professional care of them as well as many gifts to them of which few ever heard. As a surgeon he won a very enviable mark in history. By helping to develop a higher medical education in the middle west he made his name immortal.

One of the most notable qualities of Dr. Mussey was the fact he was an ardent temperance lecturer and of great help and influence to the young men of his time. (With our auto death rate what it is in 1938 would it not be well if he were living today?) In 1854 a paper of his on "The Effects of Alcoholic Liquors in Health and Disease," was published in the Transactions of the American Medical Association. (Volume 8—1855—page 573) to quote—

"What class of men is so well acquainted, both by scientific research and observation, with the mischievous effects of alcohol as a member of the medical profession?" "Has not the sober and virtuous part of the community a right to look to us for our united and untiring exertions in every possible way, towards confirming this poison along with its congeners, arsenic, strychnine, morphis and prussic acid, to the shelves of the apothecary? A poison which diminishes the powers of bodily exertion, impairs health, shortens life, converts wise men into fools and maniacs, dissolves the ties and endearments of the family circle and of social life, and draws a total and endless eclipse over the light of futurity."

Mussey was not a prolific writer, but he was clear, accurate and true. No one doubted what he reported. He did not believe in "Arabian Nights literature" which is what he called case writing. He had strong convictions with regard to hygiene, fashions in dress, and the habits of life, never hesitating to express them in lectures and in conversations.

In 1813 Doctor Mussey married a Miss Sewall who lived but three years. A few years later he married Hetty Osgood, a daughter of a Dr. Osgood, an Army surgeon. They had a number of children amongst whom were two boys who followed their father in the practice of medicine. Dr. William H. Mussey (1818 to 1882) a graduate of the Medical College of Ohio in 1848, was one of the men to reorganize the Miami Medical College in 1865. A grandson, born in 1884, was graduated from the Medical Department of The University of Cincinnati just before it merged with The Miami Medical College, March 2, 1909, to form The Ohio-Miami Medical College of The University of Cincinnati. He is now the head of the Obstetrical Department of the largest medical clinic in the country. Thus four generations have served medicine well.

Dr. Reuben Dimond Mussey's portrait is in the Surgeon General's collection in Washington, D. C., and his bust, by Frankenstern is over his tomb.

On the last page of the book giving Dr. Reuben D. Mussey's addresses in the hall of The Mechanics Institute, Cincinnati, on two successive evenings in 1852 under the titles of "Discourses" and "Early Medical Times" is the following paragraph:

"Knowing this infirmity, we should defend ourselves from ourselves. The causes of failure generally lie in our own weaknesses, of which the greatest is the want of unfaltering constance. Holding on to the end in any laudable enterprise, is, with few exceptions, to achieve a triumph. I hope, and feel, and believe that we shall steadily hold on; and, thus, when some young student now sitting thoughtful and silent in our midst, shall, with age and tottering footsteps, follow the mortal remains of the last of us to the grave, he will say to the physicians of another generation, then assembled around—'Carry forward the noble work which they began—make it better than you found it, and then hand it on to posterity'".

Thomas Corwin Tipton, M.D.

Thomas Corwin Tipton, M.D., of Williamsport, Pickaway County, Ohio, son of Thomas S. and Elizabeth Tipton, was born near Harrisburg, Franklin County, Ohio, on September 10, 1827. He attended the neighborhood schools, and by teaching in various district schools he paid his own way through Ohio Wesleyan University, Delaware, Ohio. Thus creditably, but with difficulty, he worked his way for five years. With a desire to continue his studies, and lead a professional life, he devoted his spare time to reading and study in his brother's office at Darbyville. He studied under Dr. R. L. Howard, in Columbus, and later entered Starling Medical College. Following graduation on February 22, 1852, he returned to Darbyville and went into practice as a partner of his brother.

Dr. Tipton married Miss Miranda Loomis, of Central College, Ohio, and located in Williamsport in January, 1855. From 1862 to 1865, he served as assistant surgeon of the One Hundred and Thirteenth Volunteer Infantry, and remained in that capacity until the close of the war, most of the time being, by the order of Secretary Stanton, detached from his regiment discharging hospital duty and serving upon the board of examiners of applicants for enlistment or discharge. At the close of the war, he located in Groveport, Franklin County, but three years later, removed to his old residence in Williamsport.

God and the Doctor we alike adore,
But only when in danger, not before;
The danger o'er, both are alike requited,
God is forgotten, and the doctor slighted.
—Alexander Pope.

PROCEEDINGS OF THE COUNCIL

Committees for Ensuing Year Appointed; Plans for Fall Series of Regional Postgraduate Lectures Completed; Legislative and Economic Questions of Vital Importance Discussed at Meeting Held on July 31

A REGULAR meeting of The Council of the Ohio State Medical Association was held on Sunday, July 31, 1938, in the Headquarters Office, Columbus, Ohio, with the following in attendance: President Hein, President-Elect Smith, Past-President Alcorn, Treasurer Beer, Councilors Schriver, Hogue, Klotz, McCormick, Skipp, Kirkland, Brush, Seiler and Sherburne; Dr. Upham Columbus; Dr. Forman, Editor of *The Journal;* Executive Secretary Nelson and Assistant Executive Secretary Saville.

On **motion** by Dr. Sherburne, seconded by Dr. McCormick and carried, the minutes of the last meeting of The Council, held on May 10, 1938, were approved as published in the June, 1938, issue of *The Ohio State Medical Journal*, pages 705-706.

Membership Statistics—It was reported that the membership of the State Association as of July 30, 1938, was 5,920 compared to 5,774 on July 30, 1937, and to 5,945 as of December 31, 1937.

Committee Named—Dr. Hein, the President, appointed the following Councilors as members of the Committee on Auditing and Appropriations for the ensuing year: Dr. Skipp, chairman; Dr. Sherburne and Dr. McCormick. These appointments were confirmed by The Council on **motion** by Dr. Klotz, seconded by Dr. Beer and **carried.**

NATIONAL HEALTH CONFERENCE

A prolonged discussion regarding the proceedings of the National Health Conference, held recently in Washington, took place. Following the discussion, on **motion** by Dr. Hogue, seconded by Dr. Schriver and **carried**, the President was instructed to appoint a committee to study factual data which would influence the health of the public, with instructions to report its findings to The Council, and to immediately submit recommendations on ways to inform the public regarding the findings of the committee.

A.M.A. SURVEY

Progress—Reports were presented by members of The Council concerning the progress of the A.M.A. Survey of Medical Care in the counties in their respective districts. There was also presented for the information of The Council reports obtained by the State Headquarters Office. These reports indicated a 100 per cent return of blanks on the part of physicians in several counties and a 50 to 60 per cent return in a number of others. At the same time, the reports showed that follow-up work would be necessary in the majority of counties for the purpose of stimulating interest and calling to the attention of members the importance and necessity of returning Form 1 as soon as possible.

Additional Forms—The question of distributing the new A.M.A. Blank 1F was discussed. On **motion** by Dr. Smith, seconded by Dr. Klotz and **carried**, the matter of setting the time for the distribution for Forms 1F as well as Summary Blanks was deferred until the next meeting of The Council. It was the opinion of The Council that distribution of Forms 1F at this time would disrupt the assembling of Forms 1 and that the majority of counties were not in a position, as yet, to handle the Summary Blank.

A report on the progress of that phase of the study assigned to the Headquarters Office covering state institutions, state agencies, etc., was presented by the Executive Secretary.

Financing—A communication from the Committee on Economics of the Cleveland Academy of Medicine asking whether the State Association would help to finance the cost of making the survey in Cuyahoga County, or would the cost have to be borne by the Cleveland Academy of Medicine, was given careful consideration. After thorough discussion, on **motion** by Dr. Skipp, seconded by Dr. Sherburne and **carried**, The Council decided that the State Association would be unable to provide financial assistance to the county medical societies in making the A.M.A. survey. During the discussion it was pointed out by a number of Councilors that the cost of making the survey, in the great majority of counties, would be negligible or quite small, and that even in the larger counties the cost should not be more than the local society could afford to finance from its own funds.

REGIONAL POSTGRADUATE LECTURES

Fall Series—On behalf of Dr. Cummer, chairman of the Committee on Education, the Executive Secretary presented a report on progress in formulating the programs for the Fall series of Regional Postgraduate Lectures at Mansfield, Zanesville, and Dayton-Springfield. It was reported that programs for the three meetings are being completed and that the meetings would open simultaneously the second week in September, closing near the middle of December. Plans for publicizing the meetings and sending invitations

to all members in the counties comprising the three regions were presented for the information of The Council.

Financing—Dr. Smith, retiring chairman of the Auditing and Appropriations Committee, discussed the question of financing the Fall meetings. He reported that the average cost of the series held in Regions A and B had been approximately $612.00. In order to properly finance the meetings in Regions C, D, and E, starting in September, he suggested the transfer of unencumbered Annual Meeting and Speaker Bureau funds to the amount of $2,369.54 to the Regional Postgraduate Lecture fund. On **motion** by Dr. Smith, seconded by Dr. McCormick and **carried**, The Council authorized the transfer of funds as suggested by Dr. Smith.

On **motion** by Dr. Skipp, seconded by Dr. Hogue and **carried**, The Council reaffirmed its action on October 6, 1936, to the effect that the State Association should not, at this time, accept Social Security funds for financing the Regional Postgraduate Lectures, but that such lectures should be financed from the treasury of the State Association.

COMMITTEES APPOINTED

On **motion** by Dr. Alcorn, seconded by Dr. McCormick and **carried**, the following sub-committees selected by the Committee on Public Relations and Economics were confirmed by The Council:

Sub-Committee on Workmen's Compensation: Donald B. Lowe, Akron, chairman; J. Craig Bowman, Upper Sandusky; Malcolm Cook, Hamilton; Drew L. Davies, Columbus; John W. McCammon, Cincinnati; D. M. Glover, Cleveland; and Robert L. Eastman, Mt. Vernon.

Sub-Committee on Legislation: D. C. Houser, Urbana, chairman; Emil R. Swepston, Cincinnati; H. V. Dutrow, Dayton; Carl Sawyer, Marion; D. J. Slosser, Defiance; R. M. Watkins, Cleveland; Geo. F. Linn, Norwalk; O. J. Walker, Youngstown; H. S. Davidson, Akron; J. W. Schoolnic, East Liverpool; A. Howard Smith, Marietta; Wm. F. Marting, Ironton; I. B. Harris, Columbus; J. R. Shoemaker, Cuyahoga Falls; and J. C. Larkin, Hillsboro. (Dr. Davidson died on August 1, the day following his appointment.)

Special Poor Relief Committee—A recommendation from the Committee on Public Relations and Economics that the President be authorized by The Council to appoint a Special Committee on Poor Relief to succeed the present Sub-Committee on Poor Relief, and that such committee be instructed to report its findings and recommendations, after thorough study of the poor relief question, to the Committee on Public Relations and Economics for review prior to submission of the report to The Council, was discussed. On **motion** by Dr. Alcorn, seconded by Dr. Smith and **carried**, the recommendation of the Committee on Public Relations and Economics was **approved**.

In compliance with the above action President Hein appointed the following **Special Committee on Poor Relief**: W. K. Stewart, Youngstown, chairman; R. S. Binkley, Dayton, L. D. Allard, Portsmouth; Fowler B. Roberts, Akron; E. B. Gillette, Toledo; R. N. Whitehead, Bowling Green; W. A. Holman, London; W. L. Denny, Cambridge; F. S. Van Dyke, Canton; and E. O. Swartz, Cincinnati.

On **motion** by Dr. Skipp, seconded by Dr. Hogue and **carried**, the above appointments were **approved** by The Council.

VENEREAL DISEASE PROGRAM

A resolution adopted by the House of Representatives, 92nd Ohio General Assembly, while in special session in June, 1938, was read for the consideration of The Council. Such resolution (see July, 1938, issue, *The Ohio State Medical Journal*, page 820) provided for the appointment of a commission to study methods of combating the spread of venereal diseases and to prepare legislation for that purpose. One of the chief provisions of the resolution was that the commission should study proposals for compulsory premarital physical examinations. The resolution enumerated several organizations, including the Ohio State Medical Association, which would be requested to name a representative on the commission. It was pointed out to The Council that this question had been considered by the Committee on Public Relations and Economics at its meeting on the previous evening, and that the committee recommended to The Council that it authorize the President to appoint a representative from the State Association on the contemplated commission, upon receipt of official request to do so.

On **motion** by Dr. Sherburne, seconded by Dr. McCormick and **carried**, the President was authorized to make such appointment. Pursuant to this action, President Hein appointed Dr. H. N. Cole, Cleveland, to represent the State Association on the commission, which appointment was **approved** by The Council.

LEGISLATIVE CONFERENCES

On **motion** by Dr. McCormick, seconded by Dr. Sherburne and **carried**, The Council authorized the President to call a Mid-Year Organization Conference, probably in early or mid-October, to permit officials and committees of the State Association to discuss legislative and other important questions with officers and committeemen of county medical societies. The same motion instructed the Committee on Public Relations and Economics to represent the State Association at a meeting with a special committee of the Ohio Society of Osteopathic Physicians and Surgeons, suggested by the Board of Trus-

tees of that society, for the purpose of discussing legislative questions.

COMMITTEE ACTIONS APPROVED

A report from the Committee on Public Relations and Economics suggesting definite procedure on a number of anticipated legislative questions; recommending no change in the previous policy endorsing routine Wassermann examinations in hospitalized workmen's compensation cases; and advising that the State Association should not affiliate at this time with a newly created organization contemplating the introduction of civil service reform measures, was received and discussed. On **motion** by Dr. Klotz, seconded by Dr. Skipp and **carried**, this supplemental report of the committee was approved.

MISCELLANEOUS

Amendments Referred—Amendments to the constitution and by-laws of the Greene County Medical Society, adopted by that society and submitted to The Council for approval, on **motion** by Dr. Sherburne, seconded by Dr. Skipp and **carried**, were referred for study and report to the Judicial and Professional Relations Committee.

Membership Problem—A communication from a member requesting reinstatement on the membership records of the Ohio State Medical Association for the years 1934, 1935 and 1936, because he has been reinstated as a member of his local medical society for such years, was discussed. On **motion** by Dr. McCormick, seconded by Dr. Skipp and **carried**, the member was instructed to present his State Association dues for such years to his local society, requesting the society to forward the dues to the State Association Headquarters Office, which office, upon receipt of the dues, would reinstate him on the membership records of the State Association for the years 1934, 1935 and 1936.

Committee Authorized—A communication from Dr. Carl M. Peterson, secretary of the Council on Industrial Health, American Medical Association, suggesting that the Ohio State Medical Association establish a Committee on Industrial Health was read and discussed. On **motion** by Dr. Skipp, seconded by Dr. McCormick and **carried**, the President was instructed to appoint a Committee on Industrial Health to be composed of not more than five or less than three members to work with the Council on Industrial Health of the American Medical Association.

Annual Meeting—A report on the 1938 Annual Meeting program and arrangements was presented by Dr. Sherburne, retiring chairman of the Committee on Scientific Work. Suggestions regarding the setup for the 1939 meeting were presented by members of The Council. It was announced that plans were under way to call a conference of Section Officers and the Committee on Scientific Work in the near future for the purpose of discussing 1939 program details. On **motion** by Dr. Alcorn, seconded by Dr. Klotz and **carried**, The Council expressed appreciation to Dr. Sherburne and the Committee on Scientific Work for their efficient services in arranging the 1938 Annual Meeting.

Dr. Smith, chairman of the Auditing and Appropriations Committee, presented a detailed statement of Annual Meeting receipts and disbursements. The report showed a balance in the Annual Meeting fund of $1,969.54. On **motion** by Dr. Skipp, seconded by Dr. Beer and **carried**, the financial report was **accepted** and **approved**.

It was reported that arrangements for the 1939 Annual Meeting in Toledo in May would be started as soon as information regarding the dates of the 1939 A.M.A. meeting in St. Louis is available.

A.M.A. Meeting—Dr. Alcorn, Dr. Hein and Dr. Upham presented reports on the recent A.M.A. Session in San Francisco.

Before adjourning, to meet at the call of the President, The Council officially congratulated Dr. McCormick on his election as grand exalted ruler of the Benevolent and Protective Order of Elks of the United States of America for the ensuing year.

Attest: CHARLES S. NELSON,
Executive Secretary.

Stark County Postgraduate Day Program Scheduled for October 12

The First Annual Postgraduate Day of the Stark County Medical Society will be held at the Courtland Hotel, Canton, Wednesday, October 12. The program will be presented by a group of faculty members from the University of Pennsylvania School of Medicine, Philadelphia. They are: Dr. T. Greer Miller, professor of clinical medicine; Dr. I. S. Ravdin, professor of surgery; Dr. Floyd E. Keene, professor of gynecology; and Dr. Baldwin Lucke, professor of pathology. Arrangements for the meeting are being made by the following committee: Dr. J. Edwin Purdy, Canton chairman; Dr. George N. Wenger, Massillon, and Dr. Clair B. King, Canton, president and secretary respectively, of the Stark County Medical Society. Additional details will be published in the October issue of *The Journal*.

Dr. Heiser Named Research Director

The National Association of Manufacturers has established a Committee on Healthful Working Conditions "to improve industrial health supervision throughout the nation generally". Dr. Victor G. Heiser, author of "An American Doctor's Odyssey", has been appointed research director of the committee.

Action Imperative; Ohio Plans to Act

PERSONAL COMMUNICATION TO MEMBERS

from

BARNEY J. HEIN, M.D., TOLEDO, OHIO
The President

WHEN the next United States Congress, part of the personnel of which will be elected at the General Election on November 8, assembles, into the hopper will go proposals to establish a national health program which would overshadow in scope and cost any and all medical and health activities now being carried on by the Federal Government.

The basis for this proposed national health program will be the recommendations formulated by the technical committee of the Interdepartmental Committee to Coordinate Health and Welfare, appointed in 1935 by the President of the United States, and which were presented at the National Health Conference held recently in Washington, D. C.

It is not my purpose to discuss the recommendations of the technical committee. However, I strongly urge all members of the medical profession to study those proposals which are published elsewhere in this issue of *The Journal*. We, the medical profession, cannot be prepared to meet situations in the offing unless we are informed and have a definite knowledge of the issues involved.

The primary purpose of this communication is to assure all members that those who have been elected by them to administer the affairs and activities of the Ohio State Medical Association have taken definite steps toward formulating a program of preparedness and action which we hope will be useful in meeting serious problems arising from the recent developments at Washington.

At a regular meeting of The Council of the State Association 10 days after the conclusion of the National Health Conference, The Council devoted almost an entire afternoon to careful consideration of the proceedings of that conference and their implications.

At that meeting, The Council authorized me to appoint a special committee "to study factual data which would influence the health of the public, with instructions to report its findings to The Council; and to immediately submit recommendations on ways to inform the public regarding the findings of the committee".

Implied in this action of The Council are instructions to the special committee to analyze proposals which have been submitted, or will be submitted, to the National Administration; study proposals originating from within the ranks of the medical profession; gather data bearing on the health and medical problems of the public; review present policies of our own Association and similar societies; and present findings and recommendations to The Council.

Although the special committee must keep in mind the existing policies of the State

Association and it will have available information which has been accumulated by standing committees of past years, it will be starting at scratch and will make an unbiased study of important phases of the acute situation which has arisen. There will be no red tape. The committee deems action imperative and will endeavor to work out ways and means of starting action immediately. In line with the policy that action is imperative, the committee met in Columbus on August 21, when definite lines of procedure were formulated and actual work started.

As members of this committee I have appointed to date the following: Dr. Parke G. Smith, Cincinnati, President-Elect of the State Association, chairman; Dr. L. Howard Schriver, Cincinnati, Councilor of the First District; Dr. D. W. Hogue, Springfield, Councilor of the Second District; Dr. E. J. McCormick, Toledo, Councilor of the Fourth District; Dr. William M. Skipp, Youngstown, Councilor of the Sixth District; Dr. H. V. Paryzek, Cleveland, former member of The Council; and Dr. Fred M. Douglass, Toledo, former president of the Toledo Academy of Medicine.

It is my intention to appoint additional members of the State Association to this important committee, making selections carefully from among physicians who have given thought to these questions and are willing to give time and effort to an attempt to formulate a constructive course of action for our Association. I would welcome suggestions from various members concerning additional committee personnel and, speaking for the committee, we would welcome constructive suggestions from members relative to the problems which will be studied.

Obviously, the work of this special committee will dovetail somewhat with the activities of the Sub-Committee on Legislation and with the survey of medical care now being made by the component medical societies at the request of the American Medical Association. However, the committee expects to drive to the heart of these problems quickly, realizing that time is an important factor, and hopes to be able to submit definite recommendations in the very near future for consideration by The Council. It has formulated no opinion as yet relative to the extensive proposals now in the hands of the National Administration. These will be studied and an opinion expressed in due time. It has no opinion as yet regarding the arguments which have been made to support proposals for a broad national health program. Facts will be accumulated and analyzed before an opinion is expressed. It has no course of action or programs to recommend at this time. Such recommendations will be made after research and study. It offers no solution to this hodge-podge of problems. However, it hopes to be able to present something constructive which may be utilized for the benefit of both the public and the medical profession.

If the medical profession of Ohio will back them, the officers of the Ohio State Medical Association are going to tackle this critical situation in a sane, sensible and deliberate manner, hoping that something will be developed which will help to make medical care more readily available in communities where facts may indicate there is need for improvement and which at the same time will not bring about deterioration in the standards of medical service. It is my sincere hope that this special committee will have the sympathetic and active support of the members generally.

BASIC PROPOSALS FOR GIGANTIC NATIONAL MEDICAL AND HEALTH PROGRAM SUBMITTED AT CONFERENCE HELD IN WASHINGTON; PROCEEDINGS OF MEETING SUMMARIZED

IN the August issue of *The Journal* there was published the transcript of a communication from Miss Josephine Roche to the House of Delegates of the American Medical Association in which reference was made to a National Health Conference, called for the purpose of considering "the need for a national health program".

Developments, historical in character, have taken place since that issue of *The Journal* went on the presses.

A national health conference was held at Washington, D. C. A suggested national health program, with the Federal Government as the hub, has been announced. Columns and columns of data and editorial comment have appeared in the daily press and in weekly and monthly magazines. The public has been barraged with arguments pro and con.

Most of the discussion which took place at the National Health Conference, called by the Interdepartmental Committee to Coordinate Health and Welfare Activities, appointed by the President of the United States in 1935, rotated around reports and propositions submitted by a technical sub-committee to the President last February but withheld from public consumption until the dates of the conference, July 18-20.

For the information of readers of *The Journal*, an official and verbatim summary of the report and recommendations of the technical committee is published. It is understood that legislation by which the recommendations serving as a basis for the suggested national health program can be submitted to the Congress for consideration and action is now being formulated.

A NATIONAL HEALTH PROGRAM

Summary of the Program Recommended by the Technical Committee on Medical Care to the Interdepartmental Committee to Coordinate Health and Welfare Activities and Presented to the President, February 14,1938.

THE Technical Committee's study of health and medical services in the United States indicates that deficiencies in the present health services fall into four broad categories.

1. Preventive health services for the nation as a whole are grossly insufficient.

2. Hospital and other institutional facilities are inadequate in many communities, especially in rural areas, and financial support for hospital care and for professional services in hospitals is both insufficient and precarious, especially for services to people who cannot pay the costs of the care they need.

3. One third of the population, including persons with or without income, is receiving inadequate or no medical service.

4. An even larger fraction of the population suffers from economic burdens created by illness.

The committee submits a program of five recommendations for meeting with reasonable adequacy existing deficiencies in the nation's health services. Estimates of the total additional annual costs to federal, state and local governments of Recommendations I, II and III are also submitted. The committee does not suggest that it is practicable to put into effect immediately the maximum recommendations. It contemplates a gradual expansion along well-planned lines with a view to achieving operation on a full scale within ten years. Except in so far as they overlap and include portions of the first three recommendations, Recommendations IV and V involve chiefly a revision of present methods of making certain expenditures, rather than an increase in these expenditures.

RECOMMENDATION I: EXPANSION OF PUBLIC HEALTH AND MATERNAL AND CHILD HEALTH SERVICES

THE committee recommends the expansion of existing co-operative programs under Title VI (Public Health Services) and Title V (Maternal and Child Health Services) of the Social Security Act.

A. Expansion of General Public Health Services (Title VI): Fundamental to an expanding

program of preventive health services is the strengthening and extension of organized public health services in the states and in local communities. It is recommended that federal participation in the existing co-operative program should be increased with a view toward equalizing the provision of general public health services throughout the nation. The committee further recommends that increasing federal participation be utilized to promote a frontal attack on certain important causes of sickness and death for the control of which public health possesses effective weapons.

The committee tentatively estimates that, at its peak, an adequate program of expanded public health service would require additional annual expenditures by federal, state and local governments of $200,000,000 for these purposes: strengthening of public health organization; the eradication of tuberculosis, venereal diseases and malaria; the control of mortality from pneumonia and from cancer; mental hygiene and industrial hygiene. The committee recommends that approximately one-half of these increased funds be provided by the federal government.

B. Expansion of Maternal and Child Health Services (Title V): Included in this part of the recommended program are provisions for medical and nursing care of mothers and their newborn infants; medical care of children; services for crippled children; consultation services of specialists; and more adequate provisions for the postgraduate training of professional personnel. The objective sought in this phase of the committee's proposed program is to make available to mothers and children of all income groups and in all parts of the United States minimum medical services essential for the reduction of our needlessly high maternal mortality rates and death rates among newborn infants, and for the prevention in childhood of diseases and conditions leading to serious disabilities in later years.

The committee recommends a gradually expanding program reaching at least by the tenth year a total additional expenditure of $165,000,000, distributed as follows:

Maternity care and care of newborn infants	$95,000,000
Medical care of children	60,000,000
Services for crippled children	10,000,000

The committee recommends that approximately one-half of the cost of the expanded program should be met by the federal government.

RECOMMENDATIONS II, III AND IV: EXPANSION OF MEDICAL SERVICES AND FACILITIES

THE committee has also explored the adequacy of services for the sick, the sickness experience of and the receipt of professional and hospital services by broad groups of the population. The committee finds that the needs for diagnostic and therapeutic services to individuals are greatly in excess of such accomplishments as might be effected by a strengthened program of preventive services—important as such services may be as a first step. Indeed, it has been recognized in Recommendation I that certain important causes of sickness and death require for their eradication or control the application of diagnostic and therapeutic procedures through services to individuals in need of such care.

The committee finds that current practices in the provision of medical services and facilities fall far short of meeting these needs. It has taken account of personnel and facilities, financial support of services required by persons who are themselves unable to pay for the care they need, the sickness burdens of self-supporting persons, methods of paying for medical care and of assuring income for workers who are disabled by sickness. It finds that these needs warrant an expansion of medical services and facilities on a broader front than that contemplated in Recommendation I alone.

FEDERAL HEALTH PROPOSALS STUDIED BY COMMITTEE

A special committee of the Ohio State Medical Association, appointed by President Hein by order of The Council, has the proposals submitted at the National Health Conference under consideration.

Readers of The Journal are referred to the minutes of the July 31 meeting of The Council and the personal communication from President Hein to the membership, published elsewhere in this issue, for information concerning the purposes, contemplated activities and personnel of this special committee.

RECOMMENDATION II: EXPANSION OF HOSPITAL FACILITIES

THE Technical Committee has made a special study of deficiencies in existing hospital and other institutional facilities. It is impressed with the increasing part which hospitals play, year after year, in the health and sickness services. Without adequate hospitals and clinics, it is impossible to provide many of the important services which modern medicine can furnish.

The committee finds hospital accommodations and hospital organization throughout the coun-

try ill-adapted to the varying needs of people living under different social, economic and geographical circumstances. In hospitals offering general care, the percentage of beds supported by patients' fees is out of proportion to the ability of the population served to pay, hence many general hospital beds are empty a large part of the time. Conversely, there are too few low-cost or free beds to satisfy the needs. By far the greater majority of these are found in our large metropolitan centers. There are wide areas—some 1,300 counties—having no registered general hospitals; others are served only by one or two small proprietary institutions. Only in large city hospitals have outpatient clinics been developed to any considerable extent; governmental tuberculosis sanatoriums and mental institutions tend to be overcrowded, or are otherwise restricted in funds or personnel for rendering the community service which they should be equipped to give.

The committee recommends a ten-year program providing for the expansion of the nation's hospital facilities by the provision of 360,000 beds —in general, tuberculosis, and mental hospitals, in rural and in urban areas—and by the construction of 500 health and diagnostic centers in areas inaccessible to hospitals. These new hospitals or units would require financial assistance during the first three years of operation. Special federal aid for this purpose is suggested.

Averaged over a ten-year period, the total annual cost of such a program, including special three-year grants for maintenance of new institutions, is estimated at $146,050,000 divided as follows:

	Construction	Maintenance (3-yr.)
General and special	$ 63,000,000	$21,600,000
Tuberculosis	15,000,000	6,000,000
Mental	32,500,000	7,800,000
Diagnostic centers	150,000	.....
Total average annual cost	$110,650,000	$35,400,000

The committee recommends that approximately one-half of this total annual cost be met by the federal government. It points out that a hospital construction program should not be undertaken unless there is a concurrent program to give continuing aid toward the cost of free services such as is included in Recommendation III.

RECOMMENDATION III: MEDICAL CARE FOR THE MEDICALLY NEEDY

THE committee is impressed with the evidence now available that one third of the population which is in the lower income levels is receiving inadequate general medical service. This applies to persons without income and supported by general relief and to those being supported through old age assistance, aid for dependent children, or work relief, and also to families with small incomes. These people are doubly handicapped. They have higher rates of sickness and disablement than prevail among groups with larger incomes, and they have lesser capacities to buy and pay for the services they need. Current provisions to assist these people—though generously given in many state and local governments by voluntary organizations and by professional practitioners—are not equal to meet the need.

The committee recommends that the federal government, through grants-in-aid to the states, implement the provision of public medical care to two broad groups of the population: (1) those for whom local, state or federal governments, jointly or singly, have already accepted some responsibility through the public assistance pro-

WHAT GROUPS WERE REPRESENTED AT WASHINGTON CONFERENCE?

What groups and organizations were represented at the National Health Conference by invitation of the Interdepartmental Committee?

According to a report on the conference published in *The Journal of the American Medical Association*, the conference group included: Physicians (some representing the American Medical Association, some representing the "Committee of Physicians", several representing medical divisions of industries, two representing the National Medical Association composed of colored physicians, and employes of the U. S. Public Health Service), representatives of correlated professional groups, labor organizations, mutual aid and welfare agencies and organizations, farm organizations, liberal magazines, hospitals and hospital insurance agencies, government officials, advisers to the National Administration, one osteopath, and one optometrist.

No resolutions were adopted at the conference. There was no formal acceptance of any program. There was little discussion on any subject except the propositions offered by the technical committee. There was little time for study of the factual data on which the proposals were based.

visions of the Social Security Act, through the work relief programs or through provision of general relief; (2) those who, though able to obtain food, shelter and clothing from their own resources, are unable to procure necessary medical care. It is estimated that, on the average, $10 per person annually would be required to meet the minimum needs of these two groups for essential medical services, hospitalization, and emergency dentistry. This part of the program might be begun with the expenditure of $50,000,000 the first year and gradually expanded until its reaches the estimated level of $400,000,000 which would be needed to provide minimum care to the medically needy groups. The committee recommends that one-half of the total annual costs be met by the federal government.

RECOMMENDATION IV: A GENERAL PROGRAM OF MEDICAL CARE

THE committee directs attention to the economic burdens created by sickness for self-supporting persons. There is need for measures which will enable people to anticipate and to meet sickness costs on a budget basis.

No conclusion has emerged more regularly from studies on sickness costs than this: the costs of sickness are burdensome more because they fall unexpectedly and unevenly than because they are large in the aggregate for the nation, or, on the average, for the individual family. Except in those years when unemployment is widely prevalent, sickness is commonly the leading cause of social and economic insecurity. Without great increase in total national expenditure, the burden of sickness costs can be greatly reduced through appropriate devices to distribute these costs among groups of people and over periods of time.

The committee recommends consideration of a comprehensive program designed to increase and improve medical services for the entire population. Such a program would be directed toward closing the gaps in a health program of national scope left in the provisions of Recommendations I and III. To finance the program, two sources of funds could be drawn upon: (a) general taxation or special tax assessments, and (b) specific insurance contributions from the potential beneficiaries of an insurance system. The committee recommends consideration of both methods, recognizing that they may be used separately or in combination.

Such a program should preserve a high degree of flexibility, in order to allow for individual initiative, and for geographical variations in economic conditions, medical facilities, and governmental organization. It should provide continuing and increased incentives to the development and maintenance of high standards of professional preparation and professional service; it should apportion costs and timing of payments so as to reduce the burdens of medical costs and to remove the economic barriers which now militate against the receipt of adequate care.

Planning for a program of medical care of a magnitude to serve the entire population essentially must be approached as an objective to be fully attained only after some years of development. The role of the federal government should be principally that of giving financial and technical aid to the states in their development of

DRAFTERS OF THE PROPOSED U.S. HEALTH PROGRAM

Interdepartmental Committee:—A committee appointed by the President following passage of the Social Security Act in 1935, "in order that the full benefits of the varied Federal program under the act's provisions might reach with minimum delay and maximum effectiveness the individual men, women and children for whose aid and service the program was brought into co-existence".

Its Personnel:—Josephine Roche, chairman, E. L. Bishop, executive secretary, Arthur J. Altmeyer, chairman Social Security Board, Oscar L. Chapman, assistant secretary of interior, Charles V. McLaughlin, assistant secretary of labor, Milburn L. Wilson, under secretary of agriculture.

Technical Committee on Medical Care:—Appointed by the Interdepartmental Committee to study data accumulated through a national health survey made by the U. S. Public Health Service and W.P.A. and other related data; and to report its findings and recommendations to the main committee.

Its Personnel:—Martha Eliot, Children's Bureau, I. S. Falk, Social Security Board, (formerly with the Committee on the Costs of Medical Care and the Milbank Fund), Joseph W. Mountin, George St. John Perrott, and Clifford W. Waller, of the U. S. Public Health Service.

sound programs through procedures largely of their own choice.

RECOMMENDATION V: INSURANCE AGAINST LOSS OF WAGES DURING SICKNESS

THE committee recognizes the importance of assuring wage earners continuity of income through periods of disability. A disability compensation program is not necessarily part of a medical care program, but the cost of compensating for disability would be needlessly high if wage earners generally did not receive the medical care necessary to return them to work as soon as possible.

Temporary disability insurance can perhaps be established along lines analogous to unemployment compensation; permanent disability (invalidity) insurance may be developed through the system of old-age insurance.

COSTS OF THE PROPOSED PROGRAM

THE maximum annual cost to federal, state and local governments of Recommendations I, II and III (with duplications eliminated) is estimated at about $850,000,000. This figure is the estimated total annual cost at the full level of operation within a ten-year period, and is presented primarily as a gauge of need.

The estimated total includes (1) $705,000,000—the additional annual expenditures for certain general health services to the entire population and for medical services to limited groups of the population,—the public-assistance and otherwise medically needy groups,—which should be reached within a ten-year period, and (2) $145,000,000—the approximate average annual cost of hospital construction and special grants-in-aid in the ten-year program proposed under Recommendation II. It is suggested that the federal share of this amount would be approximately one-half.

Recommendation IV is presented primarily as a more economical and effective method of making current expenditures for medical care, though it also makes provision for the medical care of persons who are not now receiving even essential services. An adequate general program of medical care is proposed in the form of alternative arrangements which may cost up to a maximum of $20 per person a year, that is, no more than is already being spent through private purchase of medical care. Annual aid from government funds would be necessary to provide services for the care of the medically needy as proposed in Recommendation III and for the parts of Recommendation I which are included in the broad program set forth in Recommendation IV.

The committee calls attention to the fact that, in some important respects, the five recommendations present alternative choices. However, the committee is of the opinion that Recommendations I and II should be given special emphasis and priority in any consideration of a national health program more limited in scope than that which is outlined in the entire series of recommendations.

The Technical Committee on Medical Care is firm in its conviction that, as progress is made toward the control of various diseases and conditions, as facilities and services commensurate with the standards of American medical practice are made more generally available, the coming decade, under a national health program, will see a major reduction in needless loss of life and suffering—an increasing prospect of longer years of productive, self-supporting life in our population.

COSTS OF PROGRAM BASED ON COMMITTEE'S PROPOSALS

Estimated costs of the various proposals embodied in the national health program suggested by the technical committee for the first year and for the tenth year, when, in the opinion of the committee, the full program should be in operation, follow:

	First Year	Maximum (10th year)
Public health services	$ 20,000,000	$200,000,000
Maternal and child health	19,000,000	165,000,000
General hospitals	84,600,000	84,600,000
Tuberculosis hospitals	21,000,000	21,000,000
Mental hospitals	40,300,000	40,300,000
Diagnostic and health centers	150,000	150,000
Care of medically needy	50,000,000	400,000,000
Totals (excluding duplications)	$235,050,000	$850,000,000

Appeal From Historian

Dr. Wm. M. Donald, of Detroit, Michigan, is compiling a short history of the Northern Tri-State Medical Association, now almost 70 years of age.

The founders and early officers of this organization seem to have been careless in preserving the official documents incident to the creation and development of the society and hence the historian's task is difficult.

Any information relative to the Northern Tri-State Medical Association during the period 1870 to 1885 should be forwarded to Dr. Donald, 938 David Whitney Building, Detroit, Michigan, who will greatly appreciate receipt of it.

Uncle Sam—M.D., LL.B., and J.P.

Department of Justice Proposes Grand Jury Investigation of the American Medical Association, Charged with Being Monopoly, As Federal Court Puts "Approved" Sticker on H.O.L.C. Group Medical Service Scheme

AT the National Health Conference held in Washington, D. C., (pages 1031-1035) several representatives of the medical profession in attendance had the courage to predict that the proposed national health and medical program presented and discussed at the conference would not be swallowed hook, line and sinker by the profession, and the people.

Within a period of 10 days following the Washington conference, two news items of significance appeared in the daily press:

1. The American Medical Association and one of its constituent units, the Medical Society of the District of Columbia, are to be subjected to a grand jury investigation, based on charges that they constitute a monopoly and are violators of the Federal anti-trust laws.

2. Group Health Association, Inc., (see page 322, March, 1938, issue *The Journal*) the medical service scheme organized by the Home Owners' Loan Corporation for its thousands of employes in and near the District of Columbia, is not a corporation engaging in the practice of medicine and in the insurance business, according to a decision of the Federal District Court of the District of Columbia.

News Item No. 1 consisted of a lengthy statement issued to the press for release on August 1, by Thurman W. Arnold, assistant attorney general in the Department of Justice of the United States.

News Item No. 2 appeared on July 29, three days before Mr. Arnold's surprising and unique manifesto, being a report of the decision of the District of Columbia Federal Court on a petition for a declaratory decree to define the status of Group Health Association, Inc., after the United States District Attorney and the Superintendent of Insurance of the District had issued opinions holding the scheme a violation of the corporation and insurance statutes.

NEITHER A CLOSED INCIDENT

It may be assumed that neither is a closed incident. Also, anyone is free to draw his own conclusions as to the motives and purposes of the action of the assistant attorney general. How these episodes will be fitted into the present controversial and complicated picture remains to be seen.

A prediction from one source as to what may happen is found in a joint statement issued by Dr. Kingsley Roberts, medical director of the Bureau of Cooperative Medicine, and Martin W. Brown, executive secretary of the Association of Medical Cooperatives, of which Group Health Association, Inc., is a member, an excerpt from which follows:

"The two actions this week will go a long way to free the road toward the establishment of more organizations like Group Health Association from the artificial obstructions which have been placed in their paths."

From a statement published in *The Journal of the American Medical Association*, this comment is culled:

"Apparently it remains to be determined whether or not the federal administration can use the laws and the courts to mold the people of the United States to its beliefs in every phase of life and living, and whether or not fundamental principles of common justice which have prevailed in this country in the past are to be relegated to the limbo of forgotten things."

Mr. Arnold's press release relative to the proposed grand jury investigation of the medical profession is an especially interesting document as it reveals that apparently modern attorneys-at-law are approaching the zenith of versatility, having reached the stage where they deem themselves competent to argue not only points of law but economic and social—even medical and health—questions with an air of finality that passeth all understanding. Mr. Arnold's statement read as follows:

THE ARNOLD STATEMENT

A preliminary investigation made by the Department of Justice in response to numerous complaints has disclosed the following situation with reference to activities within the medical profession in the District of Columbia:

Group Health Association, Inc., was organized in the District of Columbia a year ago by 2,500 Government employes, principally from the lower salary classes, to provide prepaid medical care at a cost which the members could afford to pay. This group retained its own physicians, who have undertaken to provide the members with virtually complete medical care. The Medical Society of the District of Columbia, the American Medical Association, and some of the officials of

both these organizations, are attempting to prevent this association from functioning.

METHODS USED

The methods they have used are:

1. Threatened expulsion from the District Medical Society of doctors who accept employment with Group Health Association. Because of the power and standing of the Medical Society, and the stigma sometimes attached to expulsion from it, this causes Group Health Association great difficulty in employing competent physicians.

2. Threatened expulsion from the Medical Society of doctors who take part in medical consultations with doctors on the Group Health Association staff. This in effect amounts to forcing members of the Medical Society to participate in an illegal boycott of Group Health Association doctors.

3. The exclusion from Washington hospitals of the Group Health Association staff doctors; this has been accomplished either in combination with the various hospitals or by means of influence, which may or may not have amounted to coercion, upon them. This exclusion has made it impossible for doctors affiliated with Group Health Association to practice their profession in the hospitals and it has prevented members of the association who enter the hospitals as patients from having the services of the physicians of their own choice.

SEE LAW VIOLATION

In the opinion of the Department of Justice, this is a violation of the anti-trust laws because it is an attempt on the part of one group of physicians to prevent qualified doctors from carrying on their calling and to prevent members of Group Health Association from selecting physicians of their own choice.

The department interprets the law as prohibiting combinations which prevent others from competing for services as well as goods.

The particular persons responsible for this violation can only be ascertained by a grand jury investigation. Such an investigation will be undertaken by the department in the near future.

The reasons for issuing this statement prior to the calling of a grand jury, follow the general policy heretofore announced. The two objectives of the anti-trust laws are, first, to act as a deterrent and to provide a means of maintaining competitive conditions in the future. The second objective is a constructive aim which requires the cooperation of those concerned.

In obtaining this cooperation, the Department must avoid making surprise moves. It must warn those who are engaged in what the Department considers violations of the acts of its attitude toward such activities; and in fairness to them and for their own protection, it must do so as far in advance as possible. Such advance notice may also be useful in calling the attention of Congress to the Department's interpretation of the law so that possible amendments may be considered. Advance notice of a contemplated grand jury proceeding is not always possible.

OBJECTIVE DEFINED

Tactical reasons, in some cases, as to where it is feared that witnesses may be approached, may compel action without warning. These reasons, however, do not exist in a proceeding against men of the character of those engaged in the profession of medicine.

In obtaining the cooperation necessary to accomplish the Department's anti-trust proceedings, it is necessary to put the prosecution in its proper setting. It is therefore important to repeat that an indictment for violation of the anti-trust laws does not necessarily charge a crime involving moral turpitude.

Thus, in the present case, the Department does not take the view that the offenses committed are crimes which reflect upon the character or high standing of the persons who may be involved. The analogy to which this proceeding should be compared is that of a prosecution for reckless driving, committed by a person of distinction and goodwill who is in a hurry to meet his legitimate engagements.

The absence of moral turpitude, however, does not lessen the duty of the Department to prosecute where it believes violations of the anti-trust laws have occurred. This duty has been laid upon it by Congress. Congress has given it no right to use the distinction between malicious violations of the anti-trust law and reckless or careless violations as a basis for its choice between civil and criminal procedure.

Congress has not indicated that the respectable character of the defendants or their achievements in other fields, is a consideration for the Department's action. Such matters are properly within its province in recommending the type of sentence, but not in recommending the type of prosecution.

NO ALTERNATIVE

As the Department has already announced, therefore, where evidence of violations of the anti-trust laws exists, it has no alternative except to proceed before a grand jury, except in those cases where past acquiescence or other special considerations have made a criminal proceeding inequitable.

These introductory observations are necessary because the policy of issuing statements of this character is still new. They are intended to survey the general problem of anti-trust policy of which this suit is a part. Their purpose is to create an atmosphere which leaves the door open to a constructive proposal at any stage of the litigation. In order to accomplish this it is important to understand that many types of anti-trust violations are in the nature of misdemeanors, and that the power of the courts to determine the sentence offers ample opportunity to avoid undue and unjustified severity on any individual. With the above restatement of our general anti-trust policy in mind, we may proceed to consider the particular problems relating to the practice of medicine which form the background of this proceeding.

ECONOMIC CONDITIONS OF MEDICAL PRACTICE

Although this proceeding concerns especially the District of Columbia, it is selected because its importance is nation-wide and its value as a precedent is of far-reaching consequence on one of our most pressing problems.

The illegal activities of organized medicine in this instance are typical of what has occurred in other cities throughout the country whenever cooperative health groups have been formed. In discussing the economic conditions of medicine which make this suit of great importance, it is therefore appropriate to consider briefly some of

the broader aspects of the national health problem.

CARE FOR ALL

In spite of great technical proficiency, the medical profession has not been successful in furnishing adequate medical care to all the American people at a cost that they can afford to pay. Careful studies have demonstrated that the individual practitioner, even though he devotes a portion of his time to charitable work, cannot supply all the medical needs of persons of low or moderate incomes.

Primarily this is not, of course, the fault of the doctor. It is a result of the low incomes of a large part of the community on the one hand, and of the increasing cost of adequate medical treatment on the other. The development of scientific apparatus, increasing specialization, and better standards of care, desirable as they are, have all contributed to this situation.

Recent studies by government technicians have brought out the fact that the forty million persons in the United States in families with annual incomes of less than $800 cannot pay for medical care, and in many cases do not receive it when they are in need of it.

For instance, at least half the present toll of mothers' deaths in childbearing, and of infants in the first month of life, are preventable with proper prenatal care and medical services in delivery. Half the babies born annually in this country are in families with less than $1,000 income a year. It is therefore significant that infant mortality is five times higher in families with less than $500 a year than it is in families with $3,000 or more a year.

LEFT WITHOUT CARE

These facts are cited because experience has demonstrated the definite possibility of reducing infant mortality and of danger to mothers by proper care. The enormous difference in the records of low-income families is prima facie evidence that the medical profession as it is now organized is not providing them with adequate care.

Acute illness of all kinds increases as one goes down the income scale. It is 47 per cent more prevalent in families on relief than in those with $3,000 or more annual income. Chronic illnesses are 87 per cent more prevalent in relief families; non-relief families of less than $1,000 income have twice the illness disability of families with more than $1,000.

In any one year, 10 per cent of the families bear 41 per cent of the costs of illness. Another 32 per cent of the families bear 41 per cent of the costs, while the remaining 58 per cent of the families bear only 18 per cent of the costs.

SPREADING COSTS

The same family may not stay in the same sickness group year after year. The incidence of serious illness is extremely uneven, among persons of the same income. That is the reason advanced for cooperative methods of payment for medical care; by spreading the cost over the whole membership, these methods provide adequate service to all at the cost of a moderate and uniform charge to each.

This type of organization is already familiar in the United States in dealing with hospital charges, and has proved highly successful. Group hospital plans on a cooperative basis are in force in over sixty cities and cover more than 1,500,000 subscribers.

These facts make it amply clear that the medical profession's present efforts to meet the problem of making its knowledge and skill generally available have not proved successful even from its own point of view.

Cooperative health associations are primarily aimed to help families not on relief. Theirs is the most pressing medical problem today because they have no public funds and will not go to charity. Many studies of the problem, such as the report of the committee on costs of medical care, a research committee organized under a foundation grant, bring out the fact that the moderate income groups have peculiar difficulty in providing adequate medical service for themselves.

AVAILABLE CLINICS

The medically indigent in many localities have access to free clinics or charitable services by doctors, and their unsatisfied needs may be more amply filled than at present by an expansion of private charity or governmental grants. But those with income enough to pay for some medical service either cannot avail themselves of these free facilities, or because of self respect, they do not desire to do so.

Such persons experience no difficulty when their medical needs are slight; but when serious illness strikes, or several members of the family require attention within a short time, the financial burden is excessive.

As has been stated above, these observations are made to put this proceeding in its proper setting. The Department of Justice is not in a position to decide whether or not cooperative health associations are a proper solution. Its function is rather to prevent artificial impediments by organized groups who desire to escape competition from the various attempts which may be made from time to time to bring down the cost of medical care.

The Sherman act is not a method of directing or planning the future; instead, it is a means of keeping a competitive situation open so that those who can offer services at less cost are not impeded by agreements, boycotts, blacklists, expulsions from societies, or organized activities of any character. The economic conditions are surveyed not with an idea of planning a solution, but with the idea of keeping the situation free from restraint.

CASE UNDER PROBE

The circumstances of the case under investigation: Group Health Association is a consumers cooperative organization whose members pay monthly dues; with the funds collected the association retains a staff of physicians and operates a clinic. The association has encountered opposition from the Medical Society of the District of Columbia and from the American Medical Association since its formation. The medical society's methods have already been outlined in the introductory portion of this statement. Typical examples of what has occurred may be given here.

Even before Group Health Association had begun operation of its clinic, the local medical society and the American Medical Association made public attacks upon the ethics of the association and upon its legality and its financial soundness.

At the same time the medical society began expulsion proceedings against the association's

doctors; these proceedings were based upon charges of "unethical" conduct, although the doctors' only offense had been their willingness to serve the association. Expulsion of the association's doctors was sought not only from the Medical Society of the District of Columbia, but also from other medical societies affiliated with the American Medical Association in other parts of the nation.

The proceedings against one of the association's doctors were carried to a conclusion and the doctor was expelled. Proceedings against another doctor are still pending. An effort also was made to secure the expulsion of a Washington specialist who had disregarded the society's edict by engaging in professional relations with a Group Health Association doctor.

STRIKING EXAMPLE

A striking example of the restrictions placed upon Group Health Association's doctors in securing consultations with other Washington physicians occurred in the case of a patient suffering from a serious heart ailment. The consulting specialist was instructed by an officer of the Medical Society that he could not consult with the attending association physician. It was, therefore, necessary for the patient to see the specialist alone and for the specialist to communicate his conclusions to the Group Health Association doctor by correspondence. In other instances, Group Health Association checks have been rejected by Washington consultants because of fear of the Medical Society's attitude.

The close relationship existing between the medical society and the principal hospitals in Washington has resulted in denial to Group Health Association's physicians of access to hospital facilities in the District of Columbia. Not even in emergency cases are these doctors allowed to attend their patients. For example, an association member earning $1,440 a year recently telephoned the association's surgeon at midnight and reported that her husband had been taken to a Washington hospital with acute appendicitis, and requested that the surgeon come to the hospital immediately to take charge of the case.

CHOICE DEFINED

The hospital declined to permit the association surgeon to operate, notwithstanding the fact that the member had desired this surgeon's services and had paid for them through her membership in the association.

The member, therefore, was compelled to incur heavy surgical and hospital expenses that she would not have needed to contract for if the association had been permitted to carry out, without interference, its agreement with her. She also was denied the right to have the doctor of her own choice attend to the case.

TWO—THE CHOICE OF REMEDIES

The evidence revealed by the present investigation appears to warrant submission to a grand jury for such action as that body may determine to be necessary. Such a course is in line with the ordinary practice of the department when it has information indicating that there have been violations of the criminal provisions of the law. As previously announced, the department feels that it cannot take the responsibility of declining to present to a grand jury evidence that the anti-trust laws have been violated whenever it has such evidence in its possession.

In the event that voluntary cooperation results in constructive proposals going beyond the elimination of illegal practices, the department will adhere to its previously announced policy of submitting such proposals to the court as a basis for a consent decree. The department's policy with respect to the concurrent use of civil and criminal proceedings has already been explained in detail in the statement relating to the prosecution of the auto finance companies, issued on May 18, 1938.

THREE—ECONOMIC RESULTS TO BE EXPECTED

In instituting this proceeding, the Department of Justice again emphasizes that it is not deciding what are the proper methods of solving the problems of medical economics or indeed whether cooperative health associations have a place among those methods. It simply takes the position that monopoly practices should not be employed to prevent what may be illuminating experiments in this field.

The Group Health Association seems to provide the opportunity for such an experiment, since it is composed of Government employes of general similarity of health, income and working conditions, and occupies a field in the Nation's Capital where close observation may be made of the results, and adequate publicity given to any conclusions.

The department believes that the anti-trust laws make it illegal for medical societies or individual practitioners in the District of Columbia to obtain or retain for themselves a monopoly of the community's medical services, so long as adequate standards are maintained in the treatment of patients among those doctors who are willing to serve cooperative or other groups.

NO LIMITATIONS

No combination or conspiracy can be allowed to limit a doctor's freedom to arrange his practice as he chooses, so long as by therapeutic standards his methods are approved and do not violate the law. Organized medicine should not be allowed to extend its necessary and proper control over standards having to do with the science and art of medicine, to include control over methods of payment for services involving the economic freedom and the welfare of consumers and the legal rights of individual doctors.

There should be free and fair competition between new forms of organization for medical service and older types of practice, without the use of organized coercion or illegal restraint on either side. If the newer forms of organization should result in inferior standards of therapy, as is feared by their medical opponents, that fact can be revealed only by experiment.

It is hoped that this proceeding will lead to the cessation of such practices as have been alluded to above, with the result that there may be free and fair competition between the new forms of organization and the older types of practice.

When further legislation is desirable, and if so, its form may perhaps be indicated as a result of this investigation.

THURMAN ARNOLD,
Assistant Attorney General.

Approved:

HOMER CUMMINGS,
Attorney General.

July 30, 1938.

Physicians Among Successful Candidates for Ohio Assembly and Congress

Several Ohio physicians were successful candidates in the August 9 primary. Dr. Frederick C. Smith, Marion, won the Republican nomination for Congress from the Eighth District, (Crawford, Hancock, Hardin, Marion, Morrow and Wyandot counties).

Nominees for the State Senate include: Dr. H. T. Phillips, Athens, former Athens County representative, Republican candidate from the 9th-14th District (Fairfield, Hocking, Athens, Morgan and Washington counties); and Dr. Howard V. Dutrow, Dayton, Republican candidate from the Third District, (Montgomery and Preble counties). Dr. E. LeFever, Glouster, is the Republican nominee for representative from Athens County. A former member of the State Senate from that district, Dr. LeFever also was representative from Athens County for several terms. Dr. Oscar Hayes, Akron, is one of the Democratic nominees for the House of Representatives from Summit County.

Unsuccessful candidates include: Dr. F. M. Elliott, Ada, who sought a third term as the Democratic nominee for the House of Representatives from Hardin County; Dr. William A. Quinn, Portsmouth, candidate for the Republican nomination for Congress from the Sixth District (Adams, Brown, Clermont, Highland, Pike and Scioto counties); Dr. LeRoy Fast, Paulding, who was a candidate for the Democratic nomination for the State Senate from the 32nd District (Williams, Defiance, Allen, Paulding, Van Wert, Mercer and Auglaize counties); Dr. W. Wilson Lynd, Ironton, Republican candidate for the House of Representatives from Lawrence County; and Dr. F. M. Chambliss, Xenia, Republican candidate for the House of Representatives from Greene County.

Surgeons to Meet in Philadelphia

The Second National Assembly of the International College of Surgeons will be held in Philadelphia, Pa., October 13 and 14, with headquarters at the Bellevue Stratford Hotel. All members of the medical profession of good standing are invited to attend the scientific program and various clinics. There will be no registration fee. Dr. André Crotti, Columbus, is president of the United States Chapter of the College. Details concerning the Assembly can be obtained by addressing Dr. Chas. H. Arnold, secretary, 908-12 Terminal Building, Lincoln, Nebraska.

Cleveland—Dr. Max Mahrer was awarded a bronze plaque—an exceptional merit award—for the two water colors and a sculptured head which he entered in the Physicians' Art Exhibit at San Francisco during the recent A.M.A. session.

Have you completed Form No. 1 of the A.M.A. Survey? If not, do so without further delay, and return the form to your county medical society. The greater the number of returned questionnaires, the truer will be the picture of the situation relative to the adequacy or lack of medical care in your locality.

Northwestern Ohio Medical Association to Meet at Defiance, October 4

The Ninety-Fourth Annual Meeting of the Northwestern Ohio Medical Association, comprising the Third and Fourth Councilor Districts of the Ohio State Medical Association, will be held at Defiance, Tuesday, October 4, from 9 A. M. to 5:30 P.M., with a banquet at 6:30 P.M.

The tentative list of speakers includes: Dr. Robert L. Schaefer, Detroit, Mich., "Clinical Indications for the Anterior Pituitary Like Sex Hormone"; Dr. W. Halsey Barker, Baltimore, Md., "Sulfanilamide"; Dr. Wingate M. Johnson, Winston-Salem, North Carolina, "Clinical Research in Private Practice"; Dr. Claire LeRoy Straith, Detroit, Mich., "Facial Repairative Surgery"; Dr. Emil Novak, Baltimore, Md., "Endocrine Aspects of Sterility"; Dr. Harold N. Cole, Cleveland, "Precancerous Dermatoses and Malignancy of the Skin"; Dr. Albert D. Frost, Columbus, "Ophthalmology in General Practice"; Dr. Fred H. Falls, Chicago, Ill., "Post-Partum Hemorrhage"; Dr. A. A. Brill, New York City, "The Question of Responsibility in Psychiatric Practice"; Dr. Henry W. Meyerding, Rochester, Minn., "Displacement of the Lumbosacral Spine Associated with Backache"; Dr. Lowell D. Snorf, Chicago, Illinois, topic to be announced later. There is a possibility that Dr. Ludvig Hektoen, executive director of the National Advisory Cancer Council, Washington, D. C., also will participate in the program. Speakers at the banquet will be Dr. Brill, Dr. Johnson and Dr. Novak. Addresses during the day will be presented in the Defiance High School Auditorium. The banquet will be held at a place to be announced later.

On Monday, October 3, a golf tournament will be held at the Kettenring Golf Course, Defiance.

Plans for the meeting are being arranged by Dr. D. J. Slosser, secretary of the Northwestern Ohio Medical Association. Other officers are Dr. Edward B. Pedlow, Lima, president; Dr. W. D. Hickey, Leipsic, vice-president; Dr. D. B. Spitler, Hoytville, treasurer; and the Councilors for the Third and Fourth Districts, Dr. O. P. Klotz, Findlay, and Dr. E. J. McCormick, Toledo.

FALL SERIES OF REGIONAL POSTGRADUATE LECTURES TO BE GIVEN AT MANSFIELD, ZANESVILLE, DAYTON-SPRINGFIELD



Roy W. Scott, M.D.



Clyde L. Cummer, M.D.



Thomas P. Sharkey, M.D.

COURSE No. 1 of the Ohio State Medical Association Regional Postgraduate Lectures will be presented in three sections of the state during the coming Fall and Winter, opening the first week in September. The course, part of a five-year educational program, will be similar to that presented in Defiance and Findlay for Northwestern Ohio physicians and in Chillicothe for South-Central Ohio physicians during the past year.

The program for each of the three regions, as arranged by the Committee on Education and Sub-Committee on Regional Postgraduate Lectures of the State Association, will consist of eight sessions, two weeks apart, with two lectures of 60 minutes each at each session.

Speakers have been selected on the basis of their clinical experience. They have been instructed to make their talks practical, with emphasis on diagnosis and treatment.

There will be no registration fee. Admission will be by State Association 1938 membership card. All members of the Association, regardless of location, are eligible to attend the sessions.

MANSFIELD PROGRAM

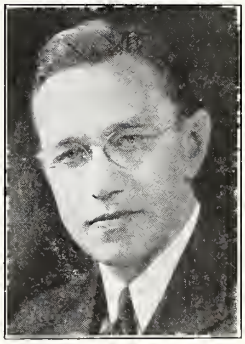
Mansfield has been chosen as the meeting place for Region C, which comprises the following counties: Ashland, Crawford, Delaware, Erie, Holmes, Huron, Knox, Lorain, Marion, Medina, Morrow,



E. J. McCormick, M.D.



J. F. Bateman, M.D.



Waldo E. Nelson, M.D.



Louis Feid, Jr., M.D.



James M. Pierce, M.D.



Edwin J. Stedem, M.D.



A. Graeme Mitchell, M.D.



Chas. J. Shepard, M.D.

Richland and Wayne. All sessions will begin at 7 o'clock, and will be held at the Mansfield-Leland Hotel, on Wednesday evenings, with the exception of the last session, which will occur on Thursday evening, December 15. The complete Mansfield program follows:

September 7—"Clinical Aspects of Arteriosclerosis", by Dr. Roy W. Scott, Cleveland; "Treatment of Early Syphilis", by Dr. Clyde L. Cummer, Cleveland.

September 21—"Pneumonia", by Dr. Gerald S. Shibley, Cleveland; "Diabetes", by Dr. Thomas P. Sharkey, Dayton.

October 5—"Intestinal Obstruction", by Dr. Louis Feid, Jr., Cincinnati; "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by Dr. Edwin J. Stedem, Columbus.

October 19—"Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. A. Graeme Mitchell, Cincinnati; "Tuberculosis in Infancy", by Dr. Waldo E. Nelson, Cincinnati.

November 2—"Common Psychoses", by Dr. J. F. Bateman, Columbus; "Cancer of the Breast", by Dr. E. J. McCormick, Toledo.

November 16—"Prenatal and Postnatal Care", by Dr. James M. Pierce, Cincinnati; "Infections of the Urinary Tract", by Dr. John S. Lewis, Jr., Youngstown.

November 30—"Angina Pectoris and Coronary Thrombosis", by Dr. George I. Nelson, Columbus; "Fungous Infections



John S. Lewis, Jr., M.D.



Russell L. Haden, M.D.



George I. Nelson, M.D.



J. I. Kendrick, M.D.



James R. Driver, M.D.



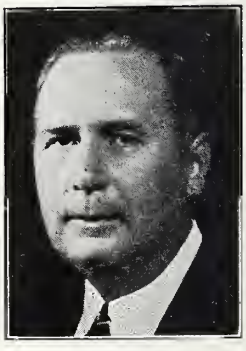
Harold Feil, M.D.



S. H. Ashmun, M.D.



H. J. Gerstenberger, M.D.



E. A. Baber, M.D.



A. B. Brower, M.D.



W. Richard Hochwalt, M.D.



Philip J. Reel, M.D.

of the Skin", by Dr. Chas. J. Shepard, Columbus.

December 15—"Arthritis: Medical Aspects", Dr. Russell L. Haden, Cleveland; "Arthritis: Orthopedic Aspects", Dr. J. I. Kendrick, Cleveland.

REGION D, ZANESVILLE

Sessions for Region D will be held at the Grotto Hall, Zanesville, on Thursday evenings, beginning September 8. Each session will begin at 7 o'clock. Counties in the region are: Athens, Belmont, Carroll, Coshocton, Fairfield, Guernsey, Harrison, Jefferson, Licking, Morgan, Monroe, Muskingum, Noble, Perry, Tuscarawas and Washington. The following program has been arranged:

September 8—"Clinical Aspects of Arteriosclerosis", by Dr. Harold Feil, Cleveland; "Treatment of Early Syphilis", by Dr. James R. Driver, Cleveland.

September 22—"Pneumonia", by Dr. C. C. Sherburne, Columbus; "Diabetes", by Dr. Cecil Striker, Cincinnati.

October 6—"Arthritis: Medical Aspects", by Dr. A. B. Brower, Dayton; "Arthritis: Orthopedic Aspects", by Dr. W. Richard Hochwalt, Dayton.

October 20—"Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. S. H. Ashmun, Dayton; "Tuberculosis in Infancy", by Dr. H. J. Gerstenberger, Cleveland.

November 3—"Common Psychoses", by Dr. E. A. Baber, Cincinnati; "Cancer of the Breast", by Dr. R. S. Dinsmore, Cleveland.

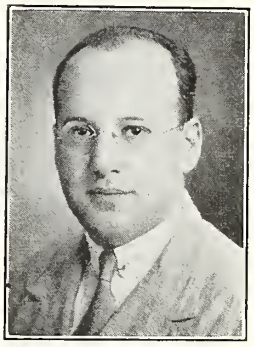
November 17—"Prenatal and Postnatal Care", by Dr. Theodore Miller, Cleveland;



E. W. Netherton, M.D.



Wm. H. Bunn, M.D.



Cecil Striker, M.D.



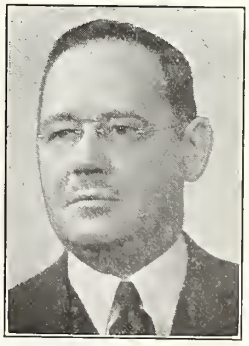
Elmer R. Arn, M.D.



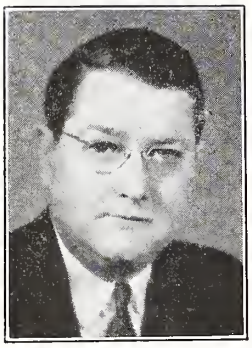
R. S. Dinsmore, M.D.



Theodore Miller, M.D.



C. C. Sherburne, M.D.



Frank C. Clifford, M.D.

"Infections of the Urinary Tract", by Dr. Wm. J. Engel, Cleveland.

December 1—"Angina Pectoris and Coronary Thrombosis", by Dr. Wm. H. Bunn, Youngstown; "Fungous Infections of the Skin", by Dr. E. W. Netherton, Cleveland.

December 15—"Intestinal Obstruction", by Dr. Elmer R. Arn, Dayton; "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by Dr. Philip J. Reel, Columbus.



Clifford J. Straehley, M.D.

DAYTON-SPRINGFIELD PROGRAM



John E. Rauschkolb, M.D.

Sessions in Region E will be alternated between Dayton and Springfield, on Wednesday evenings, beginning September 7 at Dayton. All meetings in Dayton will be held in the Auditorium of the Fidelity Medical Building, in which the offices of the Montgomery County Medical Society are located. The Springfield sessions will be held at the Hotel Shawnee. Meetings will begin at 7 o'clock. Region E consists of the following counties: Butler, Champaign, Clark, Clermont, Clinton, Darke, Greene, Logan, Madison, Miami, Montgomery, Preble, Shelby, Union and Warren. The program follows:



Claude B. Norris, M.D.



Wm. J. Engel, M.D.

September 7—Dayton—"Angina Pectoris and Coronary Thrombosis", by Dr. Frank C. Clifford, Toledo; "Treatment of Early Syphilis", by Dr. John E. Rauschkolb, Cleveland.

September 21 — Springfield — "Pneumonia", by Dr. M. A. Blankenhorn, Cincinnati; "Diabetes", by Dr. C. D. Christie, Cleveland.

October 5—Dayton—"Intestinal Obstruction", by Dr. W. B. Morrison, Columbus; "Common Lesions of the Cervix; Dif-



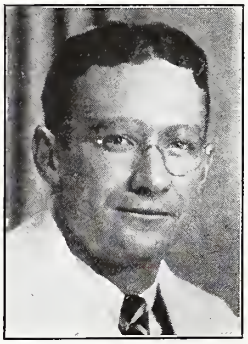
George T. Harding, M.D.



M. A. Blankenhorn, M.D.



C. D. Christie, M.D.



Marion D. Douglass, M.D.



J. Victor Greenebaum, M.D.



W. B. Morrison, M.D.

ferential Diagnosis, Preventive Measures and Treatment", by Dr. Marion D. Douglass, Cleveland.

October 19 — Springfield — "Common Psychoses", by Dr. George T. Harding, Columbus; "Cancer of the Breast", by Dr. Carl R. Steinke, Akron.

November 2—Dayton — "Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. John A. Toomey, Cleveland; "Tuberculosis in Infancy", by Dr. J. Victor Greenebaum, Cincinnati.



Floyd S. Mowry, M.D.



Carl R. Steinke, M.D.

November 16—Springfield—"Prenatal and Postnatal Care", by Dr. Floyd S. Mowry, Cleveland; "Infections of the Urinary Tract", by Dr. G. P. McKim, Cincinnati.

November 30—Dayton—"Clinical Aspects of Arteriosclerosis", by Dr. Clifford J. Straehley, Cincinnati; "Fungous Infections of the Skin", by Dr. Claude B. Norris, Youngstown.

December 14—Springfield—"Arthritis: Medical Aspects", Dr. Louis A. Levison, Toledo; "Arthritis: Orthopedic Aspects", by Dr. Walter G. Stern, Cleveland.



Walter G. Stern, M.D.



Louis A. Levison, M.D.



G. P. McKim, M.D.



John A. Toomey, M.D.

Gifts for Medical Research

Two gifts, totalling $19,000 have been made to the University of Cincinnati for further research in the College of Medicine. The John and Mary R. Markle Foundation, New York City, has appropriated $14,000 covering a two-year period, to aid Dr. Tom D. Spies in his investigations of pellagra. The other gift of $5,000 was made by the Taylor Instrument Company to further investigations made by Dr. Mont R. Reid and Dr. Louis G. Herrmann in the field of vascular problems.

Bequests to Hospitals

Recent bequests to Ohio hospitals include the following: General Hospital, Mansfield, $25,000 from the estate of the late Richmond Smith; Lake County Memorial Hospital, Painesville, $5,000, from the estate of the late Clifton N. Windecker; Hillsboro Hospital, $500 from the estate of the late Miss Margaret S. Patterson. Union Hospital, Dover, recently acquired a mobile X-ray unit through the generosity of David R. Rorney, New Philadelphia.

INDUSTRIAL COMMISSION PAYS OUT $3,278,434 FOR MEDICAL SERVICES IN 1937, ANNUAL REPORT OF ACTUARY SHOWS

ACCORDING to a recent report of E. I. Evans, chief actuary, the State Industrial Commission during 1937 disbursed $3,278,-434.49 for medical service (including a small amount for dental service); $1,293,141.92 for hospital care and nursing; $138,734.60 for funerals, and $87,756.38 for court costs, a total of $4,798,-067.39 paid during the year in addition to compensation to injured employees and death awards. This figure includes payments covering injuries to private and public employes as well as occupational disease claims.

Number of claims filed during 1937 was 237,125, as compared with 204,194 in 1936; 255,094 during the peak year—1929—and 130,099 in 1932. "Medical only" claims (in which no compensation was paid) filed during 1937 numbered 187,-975, or 79.2 per cent of the total. Average medical expense of the "medical only" claims was $7.67.

STATUS OF FUND

The financial statement of the Ohio State Insurance Fund, Table 1, at the close of 1937, carried a surplus of $1,071,813.88, an increase of $401,788.53. The statutory surplus was reduced from $3,300,547.90 to $3,268,621.03. The total assets of the Fund increased from $50,946,457.97 to $55,702,909.66, an increase of $4,756,451.69 during the year. There was a rise in the reserve for future payments of benefits from $41,361,-927.81 to $47,893,275.54, an addition of $6,531,-347.63. The higher industrial activity which resulted in a greater number of new claims filed together with the increasing cost of individual claims and the reduction in investment earnings has necessitated this substantial increase in the reserve.

A comparison of the premium income and losses, Table 2, discloses a marked increase in the last three years. On the other hand, investment earnings have greatly declined, notwithstanding the fact that the claim reserves have shown a marked increase. The losses include the total claim obligation of the Fund for compensation, medical, hospital and funeral benefits. The claim reserves are invested and the interest earnings thereon are used to assist in meeting future benefit payments.

The only portion of the premium and investment earnings not used for claim benefits is for the maintenance of the Division of Safety and Hygiene (limited to one per cent) and for audits of the Fund, expenses of which are provided by statute, and for the year 1937 amounted to $147,863.

It will be noted that during 1937, 97.5 per cent of the total premium earned was allocated to meet losses incurred for claim benefits leaving only 2.5 per cent of the earned premium to apply toward surplus and statutory expense referred to heretofore.

Benefits amounting to $14,874,085 were disbursed in 1937 to workmen and dependents of deceased workmen who were injured while in the employ of private employers insured in the Fund. This does not include employees of self-insurers, public employees or benefits paid because of occupational diseases.

Compensation paid injured employees and for death benefits amounted to $10,403,364. Other claim costs paid from the private fund including fees paid to physicians, nurses, hospitals, undertakers and for court costs totaled $4,470,721.

Table 3 shows how these payments were distributed in accordance with the year in which the accident occurred. Of the benefits paid in 1937, 42 per cent covered accidents occurring during the year. Accidents which ocurred prior to 1937 were responsible for 58 per cent of the total amount paid. The amount of $1,318,823, or 9 per cent, was paid for claims in which the accident had occurred 10 or more years prior to 1937.

The average cost of claims increased 6 per cent in 1937, compensation costs increased 7 per cent, while other claims costs, including medical, increased 4 per cent.

INCREASED CLAIM COST

Commenting on the increasing cost trend of claims, especially those of over five years' duration, the actuary's report stated:

"The extensive revival of old claims that have been dormant for long periods of time and the tendency of many to encourage claimants to assert claims for benefits beyond a normal period commensurate with the severity of the injury, are substantial contributing factors. The increase in litigated cases is likewise adding to the cost. The activity of these cases develops an accompanying increasing medical cost.

"As a result of the activities of many persons in behalf of claimants and accompanying increased litigation, workmen's compensation benefits have been extended to include impairments due to non-occupational injuries and diseases, old age, unemployment and economic causes, thus being applied to disabilities emanating from sources never contemplated when the law was enacted."

In submitting the report, Mr. Evans urged that the cooperation of the public, employers and labor should be secured to assure that adequate facilities are available for the administration of the Fund. He pointed out that the nature of in-

(Continued on Page 1048)

TABLE 1

OHIO STATE INSURANCE FUND

(Workmen's Compensation)

FINANCIAL STATEMENT AS OF DECEMBER 31, 1937

*PRIVATE FUND

ASSETS

BONDS AT AMORTIZED VALUES			$48,728,276.86
State Treasurer's Bond Balance	$49,219,716.39		
*Less Public Fund	2,033,105.94		
Par value of bonds		$47,186,610.45	
Amortized value over par		1,541,666.41	
All bonds are in the custody of the State Treasurer and consist of obligations of the Federal Government and Ohio taxing districts.			
CASH IN BANKS			3,313,751.93
Certificates of deposit drawing interest	$ 1,206,068.25		
Checking account without interest	2,250,418.85		
State Treasurer's balance		$ 3,456,487.10	
*Less Public Fund		142,735.17	
All deposits are in Ohio banks and are protected by depository bonds held by the State Treasurer.			
PREMIUMS IN COURSE OF COLLECTION			3,148,067.24
No premiums more than 60 days old are included.			
INTEREST ACCRUED			512,813.63
TOTAL ASSETS			$55,702,909.66

*The Ohio State Insurance Fund is separated by statute into two funds. The Private Fund covers employers in private industry, while the Public Fund covers the State, municipalities and other taxing districts.

LIABILITIES

RESERVE FOR COMPENSATION AND MEDICAL BENEFITS	$47,893,275.54
To cover future payments on claims where the inception of the injury or disease was prior to January 1, 1938. Compensation and other benefits extend over periods of time and, in some cases, during the remainder of the life of a claimant.	
OUTSTANDING WARRANTS	379,759.21
Warrants issued for claim benefits which had not been presented for payment to the State Treasurer by December 31, 1937.	
UNEARNED PREMIUM	3,089,440.00
Advance premium paid for coverage beyond December 31, 1937.	
STATUTORY SURPLUS	3,268,621.03
To provide for catastrophe losses and other statutory contingencies. (No reinsurance is carried to cover catastrophe hazard.)	
SURPLUS	1,071,813.88
To provide for general industrial trends and non-statutory contingencies.	
TOTAL LIABILITIES AND SURPLUS	$55,702,909.66

TABLE 2

Comparative Income, Losses and Expense

Year	Earned Premium	Losses Incurred	Minus Investment Earnings	Net Losses Incurred	% of Losses to Premium	Expense
1935	$11,985,744	$12,588,890	$1,713,539	$10,875,351	90.7	$119,821
1936	16,691,107	16,873,869	1,621,641	15,252,228	91.4	131,003
1937	20,531,783	21,350,784	1,336,726	20,014,058	97.5	147,863

dustrial operations has vastly changed in the last 20 years; that payroll auditing, premium collection and claim procedure have been made more complex by more amendments to the law and through judicial interpretation; and that the resources and facilities providing for the administration of the law have not kept pace with this great complexity and with increased volume of work.

TABLE 3

1937 Benefit Disbursements From Private Fund Distributed to Year of Accident Occurrence

(Excludes Occupational Disease)

Year	Compensation	Medical and other Costs	Total	%
1937	$3,107,485	$3,160,907	$6,268,392	42.1
1936	1,316,894	597,565	1,914,459	12.9
1935	698,653	149,633	848,286	5.7
1934	627,119	78,971	706,090	4.7
1933	488,491	81,988	570,479	3.8
1932	552,882	63,445	616,327	4.1
1931	794,229	60,520	854,749	5.8
1930	778,904	65,965	844,869	5.7
1929	502,969	56,047	559,016	3.8
1928	320,661	51,934	372,595	2.5
1912-1927	1,215,077	103,746	1,318,823	8.9
Total	$10,403,364	4,470,721	14,874,085	
Percent	69.9	30.1	100.	100.

RATES REVISED

The annual revision of rates effective July 1, 1938, carries a reduction in the general level of 1 per cent. This reduction is not general, but applies only to those classifications wherein the accident cost experience was favorable. In those classifications where the experience develops an adverse trend an increase in rate has been made. There are 231 classifications, 57.5 per cent, in which no change was made in the rate; rates were increased in 95 classifications, 23.6 per cent, and rates were decreased in 76 classifications, 18.9 per cent of the total.

ACTUARIAL AUDIT

The Workmen's Compensation Law was recently amended to require that an actuarial audit of the Fund be made by recognized insurance actuaries at least once in each five years, and that such audits shall cover the premium rates, classifications and all other matters involved in the administration of the Fund. The expense of the audits is to be paid from the Fund.

The firm of Woodward and Fondiller, Inc., consulting actuaries of New York City, was selected to make an audit and examination of the Fund as provided by the statute. This firm is recognized as one of the foremost of the United States and has had extensive experience in such work for State Funds and insurance companies writing workmen's compensation insurance. Its report covering all phases of the examination will be available at a later date.

Act Setting Up District Boards of Claims Held Unconstitutional

On August 1 the Court of Appeals of Franklin County declared unconstitutional an act (Amended House Bill 235) passed at the last regular session of the Ohio General Assembly, establishing four district boards of claims with authority to decide claims filed under the Workmen's Compensation Act.

The bill became effective August 18, 1937. On October 7, Governor Davey announced the appointment of 12 district board members, three each in offices established in Cleveland, Toledo, Dayton and Canton. Thereafter these boards considered claims referred to them by the Industrial Commission.

Two suits were brought in the Court of Appeals of Franklin County, one by an employer to prohibit the Industrial Commission from referring claims to one of the district boards, and the other by a claimant to force the Commission to hear his claim which the Commission had referred to a district board of claims. The prohibition action brought by the employer was dismissed upon a procedural technicality. It was in the suit brought by a claimant, an action in mandamus, in which the Court of Appeals held the claims board act unconstitutional, stating that "the legislature, having elected to establish the Industrial Commission as the board and to empower it to administer the Workmen's Compensation Law, has no authority to apportion certain of the duties enjoined upon that single board to other bodies".

Although recognizing the enormous increase in the number of claims filed with the Industrial Commission, the court doubted the practicality of the claims board act, commenting that "the extent to which the operation of the act under consideration will lessen the onerous duties of the members of the commission is problematical". It also was pointed out that there is no constitutional limitation on the number of members of the Industrial Commission.

Although this decision invalidates the claims boards, it will not affect any of the claims decided by these boards because the Industrial Commission had the foresight to make it a practice to adopt the decisions of the claims boards and make them the decisions of the Industrial Commission.

The question of the constitutionality of the act will undoubtedly be carried to the Ohio Supreme Court for final determination.

Cleveland—Dr. Wilton M. Krogman, associate professor of anthropology and anatomy of the School of Medicine of Western Reserve University has resigned to take a similar position at the University of Chicago.

COUNTY MEDICAL SOCIETIES URGED TO ASSIST IN PROGRAM TO AID HARD OF HEARING AND TO PREVENT DEAFNESS

By EDWARD KING, M.D., Cincinnati, Ohio

Editor's Note: The following article prepared by Dr. King, Cincinnati otolaryngologist, a member of the Sub-Committee on Public Health Education, Ohio State Medical Association, at the request of the committee, is published to assist the committee in stimulating active interest on the part of physicians and county medical societies in the program to aid the hard of hearing and to prevent deafness which has been undertaken by the committee.

THE Ohio State Medical Association, through its Sub-Committee on Public Health Education, has undertaken a program to aid the hard of hearing and to prevent deafness. In a great many states there are standing committees on deafness prevention and amelioration, but our State Association, anxious to prevent the formation of too many standing committees, assigned this work to a committee already formed and operating. It seems to me that the valuable feature of this form of organization is the close cooperation that will be obtained with the membership at large.

The program is very definite in scope. Our aim is to stimulate active interest in the field of deafness prevention, the conservation of hearing, and the amelioration of the hard of hearing. We must acquaint physicians and the public with the problem of the hard of hearing. When we remember that there are 10,000,000 persons in the United States who have a loss of hearing, many of whom are severely handicapped, because of late discovery or neglect, then we realize that this program must be furthered to the utmost of our ability.

We must insist that modern scientific hearing tests form a part of every school health program. The modern method of testing the hearing consists in using an audiometer. Any intelligent school nurse or teacher can examine 40 or more pupils at one sitting, and in a short space of time with this instrument.

A great many cases of deafness can be prevented by giving timely attention to the early discovery of even a slight degree of hearing loss, and a prompt avoidance or removal of the causes of impairment. Many of the causes occur in infancy and early childhood. Protection from scarlet fever, measles, diphtheria, mumps, influenza and colds will prevent deafness. The removal of diseased tonsils and adenoids, the eradication of sinus disease and nasal obstruction will help. Improper methods of diving and swimming should be avoided. The hearing tests will often explain why a child fails in his classes, has a speech defect, or seems stupid.

The protection of the hard of hearing from charlatans and quacks is important. The studies made by the American Medical Association on nostrums and quacks will be of great value in exposing the most common of the fradulent cures and devices.

Much can be done to improve the condition of the hard of hearing. Every school child who has sufficient hearing loss, should be taught lip reading. The use of a modern hearing aid should be encouraged by the physician. The hard of hearing person is constantly on nervous tension in the effort to hear, and very often the electric hearing aid will make the patient completely comfortable, and aid in keeping the contacts which are so essential to normal living. Too many patients refuse to wear aids because of vanity. The medical profession should make every endeavor to induce children and adults to adopt any means of keeping contacts, gaining a livelihood and insuring happiness.

It is necessary for the county medical societies to arouse interest in this program. The cooperation of the health agencies for the examination of children in the schools and the institution of lip reading classes for hard of hearing pupils, by the school boards is essential. The county medical society can do much to bring this about.

Open New Offices

New offices have been opened in Ohio by the following physicians: Dr. H. C. Wenzinger, Continental; Dr. O. W. Hoffman, Franklin; Dr. K. O. Kennedy, Ashley; Dr. A. P. Basinger, Terrace Park; Dr. George E. Rice, Kent; Dr. William B. Harris, Columbus; Dr. L. S. Persell, Alliance; Dr. Richard Sloan, Marietta; Dr. E. C. Swint, Fremont; Dr. Harold A. Robinson, Elyria; Dr. J. C. Kurtz, Stoutsville; Dr. Evan C. Fowler, Sebring; Dr. John H. Smith, Sebring; Dr. L. D. Lebold, Warsaw; Dr. P. E. Drungenbolz, Carey; Dr. Peter P. Palsis, Vinton; Dr. E. J. Nipple, St. Clairsville; Dr. W. H. Carey, Bellefontaine; Dr. R. A. Snyder, Portsmouth; Dr. Paul Over, Spencer; Dr. R. H. McKelvey, Salem; Dr. Joseph L. Shepard, Corning; Dr. Watson D. Parker, Sandusky; Dr. Richard J. Sanderson, Wauseon; Dr. Howard N. Kuhn, Bellevue; Dr. Nathan Kalb, Spencerville; Dr. William A. Knapp, Barnesville; Dr. John E. Allgood, Petersburg.

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

"You can count on F.D.R. to push these pieces of legislation next session: Administrative reorganization, regional conservation, part or all of the National Health Program, amendments to Social Security Act (extending benefits to workers now omitted), some sort of tax revision, parts of anti-monopoly program (whole program won't be ready till 1940), revision of Neutrality Act. Results of the fall elections will determine whether certain of the measures will be moderate or sweeping but unless Democrats take an unexpectedly harsh licking, all will be pushed in one form or another."—Newsweek.



* * *

"Put it down that a long step toward establishing permanent free public medical relief will be taken by Congress next year, regardless of the elections. The drive for federal-state aid of the 'medically needy' is backed by all the forces that make for success. The administration is behind it. Congress has already blazed the trail. All relief and social security agencies, Townsendites and other old-age relief enthusiasts are working for the new idea. It is a remarkably solid pressure group. The opposition is not only unorganized, but demoralized and bewildered.

"Spearhead of the movement is the 'president's committee to coordinate health welfare activities'. This is engineered by federal officials who have received the go-go signal. This committee has elaborated a program that calls for initial expenditure of $850,000,000 on a 50-50 federal-state basis. It provides for care of 250,000 penniless nursing mothers and their babies; $10 per capita for medical relief of 40,000,000 'medically needy' people; construction of 360,000 hospital beds for public relief patients, and a system of disability insurance.

"Congress has already made large appropriations for extension of public health activities."—**Washington Whirligig.**

* * *

"Dr. Glenn Frank, chairman of the Republican program committee, announced yesterday that the committee will consider the proper scope of governmental responsibility for medical care. This problem is to be studied at a round-table discussion August third in Chicago.

"'Every aspect of this vital and highly debatable question will be discussed in an objective manner by competent and experienced authorities,' Dr. Frank said. 'Health insurance in its various forms, voluntary and compulsory, will be presented by proponents and by vigilant critics. The end sought is a responsible scrutiny of a problem which is now of high national significance and which contains the possibilities both of great social advances and of great social errors.'

"Among those taking part in the discussion will be Dr. S. S. Goldwater, commissioner of hospitals of New York City; Dr. Arthur C. Christie of Washington, D. C.; Dr. John F. Peters of Yale University, Dr. H. L. Snyder of Winfield, Kansas, and Mrs. James E. Hollingsworth of New York City."—**Chicago Tribune.**

Note: To date no public announcement has been made relative to the discussions which are scheduled for August 3.

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"A strong stream of interest in the problems of spreading medical care ran through the conference (National Conference of Social Work), often cropping out in unexpected places. With it went an undercurrent of feeling, sometimes welling up in fervid discussion.

"At a session of the conference Committee on Medical Care, Alexander Ropchan, of the Chicago Council of Social Agencies, made a forceful plea for general availability of medical care, stressing the social factors involved and the place of the social worker in interpreting health needs in terms of community action. At the same session, Dr. R. G. Leland, director of the bureau of medical economics of the American Medical Associa-

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"The medical profession can rest assured that the Federal Administration contemplates no action detrimental to their interests. . . . The overwhelming majority of doctors of the nation want medicine kept out of politics. On occasions in the past attempts have been made to put medicine into politics. Such attempts have always failed and always will fail." —President Roosevelt in Jersey City Medical Center dedication address, October 2, 1936.

tion, spoke on the relations of social work and medical care from the standpoint of the medical profession."

"In closing the meeting its chairman, Helen Hall of New York, assured Dr. Leland that his audience would agree with him that the central figure is the sick patient. 'If we can work with Dr. Leland in getting some kind of health security for neglected groups, we'd like to. But if we can't, I guess we're just going to work.'"—Survey Midmonthly.

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"Some time ago I directed the Social Security Board to give attention to the development of a plan for liberalizing and extending the old age insurance system to provide benefits for wives, widows, and orphans. More recently, a National Health Conference was held at my suggestion to consider ways and means of extending to the people of this country more adequate health and medical services and also afford the people of this country some protection against the economic losses arising out of ill health.

"I am hopeful that on the basis of studies and investigations now under way the Congress will improve and extend the law. I am also confident that each year will bring further development in Federal and state social security legislation—and —that is as it should be. One word of warning, however. In our efforts to provide security for all of the American people, let us not allow ourselves to be misled by those who advocate short cuts to utopia or fantastic financial schemes."—**President Roosevelt in radio address, Aug. 15, 1938.**

* * *

"There should be compulsory health insurance as part of the Social Security System, administered in the Social Security Department. . . . We are opposed to a voluntary system. . . . . If health insurance is to be established at all it should be established from the outset in the most effective way possible; that is by a compulsory system. The system should be tax-supported in some degree."—**Joseph A. Padway, Washington, D. C., counsel, American Federation of Labor, quoted in The United States News.**

* * *

"Health insurance is the unfinished business of a broad social security program for this country and constitutes a problem lying just ahead for the American labor movement", Spencer Miller, Jr., New York, director of the Workers' Education Bureau of America, told the Ohio State Federation of Labor at Hotel Netherland Plaza yesterday.—Cincinnati Enquirer.

* * *

"Evidence is popping up all over the map that the socialized medicine camel is getting the tip of its nose in the Social Security tent. The incoming congress will be asked to add some form of health insurance to the Social Security scheme, and that will carry with it government paid doctors and free medicine. It must be added that so many new things are being considered for the Social Security plan that its best friends are beginning to fear it is getting too big. One said:

"Remember what happened to Primo Carnera?"—Herbert Corey in Nation's Business.

* * *

"The National Health Conference which met in Washington, July 18 to 20, revealed a striking contrast between the positions of the official hospital representatives and the official representatives of the American Medical Association. The latter very early in the conference put themselves on the defensive. . . .

"There were no attacks on the hospitals or their representatives. They did not have to apologize, defend or explain.

"The hospitals could point with pride to the fact that more than five years ago they endorsed the idea of hospital care insurance. They could report that already more than 2,000,000 persons are protected by it. They could predict with reasonable confidence that by 1942 probably 10,000,000 persons will be so protected. Mention of 'high cost of hospital care' did not infuriate them."—**Editorial in Modern Hospital.**

* * *

"Undoubtedly reform should and will take the form, in part, of compulsory health insurance as a part of a social security system; however, this does not do away with the emergency necessity of the immediate establishment of a system of Government-supported hospitals, clinics, health education, convalescent homes, preventive education projects, etc."—**Florence Greenberg, legislative chairman, counsel of auxiliaries, Steel Workers' Organizing Committee, quoted in The United States News.**

* * *

"We feel that in order to insure adequate health facilities for all the people and particularly for those in the lower income groups and the unemployed it will be necessary for the Federal Government to assume the responsibility and to initiate a comprehensive long range program. Compulsory health insurance should by all means be provided and could undoubtedly become an integral part of the social security system."—**John E. Middleton, New York, executive secretary, International Workers Order, quoted in The United States News.**

* * *

"What is in fact necessary is both a system of voluntary group insurance methods for those who have an income which is adequate enough to pay for such care, and a compulsory system

for those who cannot pay and never could pay for the right kind of medical care."—**Paul E. Anderson, economic adviser, United Mine Workers of America, quoted in The United States News.**

* * *

"I believe that this reform should be along the lines of compulsory health insurance, based on a tax-supported system. Effective improvement cannot be achieved on a voluntary basis." —**Mary Dublin, New York, general secretary, National Consumers' League, quoted in The United States News.**

* * *

ET CETERA, ET CETERA, ET CETERA!

Asks the Inquiring Reporter: Are there two Oscar Chapmans in the Department of Interior or is the Oscar Chapman who is a member of the technical committee on medical care which ran the recent National Health Conference the same Oscar Chapman alleged by Congressman Mason, Illinois, to be a member of certain "front organizations" with "respectable names" but "dominated by the Communist party"?

Minimum Program for Activities of County Societies Suggested

As most county medical societies in Ohio resume activities in September after the customary Summer vacation, the minimum program recently suggested by the California Medical Association for its component county societies seems to us quite timely and well worth passing on: Here it is:

Section 1. Scientific.

(a) Ten meetings to be held each year. Local speakers are to appear before six meetings with definite planned papers or case presentations. Four guest speakers.

(b) A program of physical examination in which all members shall agree to have a complete physical examination yearly.

(c) The establishment of a "Health Hour" in each member's office once or twice a week before or after regular office hours. The Society to sponsor publicity to acquaint the public with the fact that during these hours persons unable to pay regular fees will be given tests and immunization treatment for a reduced fee, this fee to be determined by the county society.

(d) Each society to form one or more teams, composed of two or three members, who will prepare a program and present it on request before an adjacent county society.

Section 2. Public Education and Information.

Each society shall sponsor or cause to be sponsored at least five public lectures during the year for: each high school; Parent-Teacher organizations; luncheon clubs; women's clubs; public at large.

Section 3. Social Functions.

Each society shall hold at least three dinner meetings to be addressed by educators, business men, attorney or civic official; one annual banquet; one annual picnic; joint dinner with dentists, attorneys, pharmacists, and hospital officials.

Section 4. Publicity.

Each meeting and activity shall be reported to local newspapers in such form that at least one important fact of interest and value to the public is imparted.

If county societies will adopt this minimum program it is predicted that members will reveal interest and attend. This program is not a self-starter—someone has to assume the initiative. Will you be that someone in your county?

To say that there never was a time in the history of organized medicine when a going, active unit in every county in the state is more essential is really an understatement. While the program outlined above may seem somewhat ambitious, it will be noted that our California colleagues consider it a "minimum program". Certainly it is something for county society officers throughout Ohio to think about when they consider ways and means of enlisting and holding the interest of members.

It just seems inconceivable that conditions can ever be right in this country again. Trade and industry throughout the land are disorganized. The problem of unemployment has become general.—Daniel Webster, in 1837.

Two Pairs a Good Hand But They Never Beat a Full-House

We once knew a chap who was a habitual kicker about the way the state and national governments were being run and how the State Legislature and the Congress always made a mess of things. For a long time we were inclined to believe he knew his stuff. However, one day we discovered that on several momentous occasions he had failed to vote in state and national elections and that he knew little, if anything, about the qualifications of various candidates when he did exercise his franchise as a citizen. Right then and there we checked him off as ineligible for the anvil chorus, even the mourners' bench, and we ceased feeling sorry for him.

This leads us to observe what every physician knows by now—primary elections were held on August 9—and to remind those who need reminding—the general election will be held on Tuesday, November 8.

It would be interesting to know how many

physicians neglected to vote in the party primaries and how many voted with little, if any, knowledge of the qualifications of those seeking nomination.

It will be interesting to observe how much interest will be taken by the medical profession generally in the campaigns which will take place between now and November 8; whether physicians will make any effort to find out about the qualifications of the candidates; whether the legislative committeemen of the various county medical societies will make any effort to obtain accurate information regarding candidates and disseminate such information to the members of their respective societies.

If the profession joins with other voters in voting blindly, let there be no tears over spilled milk or loud wails from the crying room. The results will be exactly what those who vote without knowledge or without having made any effort to acquire knowledge, deserve—although it will be pretty tough on those who do qualify for a place among the intelligent electorate.

The medical profession must not take part in politics, according to some highly respected but naive members of the profession. Horsefeathers! Of course, medical societies are not and should not be political organizations. But, since when should a physician ignore the fact that he is a citizen and as a doctor of medicine should be vitally concerned in placing in public office, individuals who believe in maintaining high standards in medical and public health activities of government? Since when is it a crime for physicians to accumulate and disseminate among themselves, information regarding candidates for public office?

Physicians, like every other group worth mentioning, must take part in politics—not partisan politics but the kind of politics which will make them politically-minded enough to want good government; want good men and women in public office; and want to know about the ability and qualifications of those aspiring for such office.

We are not expecting every member of the State Association to read this and we do not expect all who do, to take it seriously or do anything about it. But, to those who do read what has been said and then refuse to roll up their sleeves and go to work for candidates who deserve public confidence and trust, we can only say: Don't say you haven't been warned; don't start crying on somebody's shoulder after the votes have been counted; don't expect a few faithful to accomplish the super-human job of protecting medical and public health standards and the interests of the profession with the cards stacked against them. Two pairs is a pretty good hand on some occasions, but they never beat threes or a full-house. Think it over.

Only Way to Save the Calf is to Keep the Rope Anchored

That old saying "give the calf enough rope and it will hang itself" repeatedly has proved itself a truism. For that reason those engaged in selling their wares or ideas should be wary lest they spoil a good thing by overselling.

This warning might well be applied to the present campaign to control and eradicate syphilis. The motives of the campaign are good. Much good has been done so far. Greater benefits are certain to accrue if the program is properly controlled and is kept out of the hands of professional promoters, publicity-seekers and commercially-minded.

It is well for the public to know about syphilis; how it may be prevented; what can be done for it. At the same time, there must be some propriety in disseminating the information, some recognition that there must be a scientific approach to the problem, demanding dignity and orderly procedure. Undignified and overdone publicity will cheapen the whole movement. When that happens an adverse reaction on the part of the public may be anticipated.

One example of how the theme can be overdone and the whole idea cheapened is cited by George Jean Nathan, theater reviewer extraordinary, in the following excerpts taken from one of his recent reviews published in Newsweek:

"The deplorable reticence which once enveloped the mention of syphilis has been succeeded by an equally deplorable volubility. Suddenly released from the moralistic vocabulary restriction, maiden aunts and others who hitherto shrank modestly from the articulation of even such a word as bellyache currently permit themselves the spirochete pallida as a favorite topic of conversation. Family and ladies' magazines that formerly considered it the highest of daring to print terms like breast, thigh, virgin, or concubine presently interrupt their articles on Shirley Temple's home life and Bishop Manning's petunias with lengthy treatises on Wassermann and Kahn tests and the desirability of making certain three times a day that one's knee reflexes are in good working order, along with the latest market quotations on Salvarsan. It has got to the point where even breakfast-table talk is often so occupied with the subject that you are lucky to get a breathing spell in which to down a demitasse.

"The Federal Theatre now joins in the promiscuous gabble with a slice of its Living Newspaper called *Spirochete*. Confected by one Sundgaard, the exhibit has been launched in Chicago and is due in New York in the fall. It traces the spread of the disease from its first appearances among the sailors under Christopher Columbus in 1493, the battle of such men as Fracastoro, Hunter, Schaudinn, Bordet, Metchnikoff, Wassermann, Ehrlich, and others to get at its nature and check its course, and the moral hostility that so long hindered an open fight against it and that latterly has been broken down and conquered. While the presentation obviously exercises its facile effect upon all such persons as were once

agitated by the white-slave films, it must strike the more instructed as little else but a crudely amateurish outline of a profound scientific record, with not one-fiftieth the dramatic power of some such capably contrived play as that study of yellow fever shown several years ago under the title of 'Yellow Jack' and with not one-twenty-fifth of even that proficient claptrap on its own theme, Brieux's 'Damaged Goods.' "

There are factors other than the presence of a medical man necessary to the safeguarding of health.—The Weekly Roster and Medical Digest, Philadelphia, Pa.

Doctrine of Confidential Communications and the New Social Era

Apparently the Department of Internal Revenue has decided that the doctrine of confidential communications has no place in the new social era. Quoting from a Washington, D.C. newspaper:

"Uncle Sam's tax collectors have invoked a little known provision of the 1926 law that threatens to violate the sanctity of relationship between physician and patient, lawyer and client, minister and church-goer. To the knowledge of the Capital's medico-legal experts it has never been so utilized before.

"The case now provoking professional howls involved a man who transferred property within two years of death, thereby arousing official suspicion that the transactions were designed to cheat the Treasury.

"An internal revenue agent moved in on the man's doctor with the demand that the latter turn over the complete medical file in the case—possible evidence that the taxpayer had distributed his fortune in anticipation of death. When both the physician and his lawyer protested that such procedure was outrageous and illegal, the Government man cited Section 820, Paragraph b, Title 111 of the 1926 law.

"That provides that 'whoever' withholds any record with respect to a descendant's estate shall be liable to a fine of $500.

"Most judges ordinarily hold that such exchanges are confidential, but the very application of law forces defendants to apply to the court for refuge, with consequent expense, trouble and notoriety."

It is becoming more difficult daily for one to remember way back when the individual had certain inherent rights; when he had a right at least to think without having his innermost thoughts spread upon the public records; and when he had a right to confer with his spiritual, legal and medical advisers in the absence of governmental checkers-up.

Anyone so naive as to believe that all governmental measures are for the good of the people and the people alone, should refresh their historical knowledge.—Jackson County, Missouri, Weekly Bulletin.

It May Be News To Most of You, Or Is It?

Fall series of Ohio State Medical Association Regional Postgraduate Lectures will be held at Mansfield, Zanesville and Dayton-Springfield, starting the first week in September . . . detailed information elsewhere in this issue . . . a big success so far, these meetings should be attended by all physicians in those sections of the state . . . November 8 is General Election Day . . . now is the time to begin finding out where candidates for the General Assembly stand . . . Biggest disappointment of the present depression to the White House is turning out to be social security, according to a commentator in the United States News . . . too much red tape and impossible administrative complications are given as the reasons . . . apparently everything not as rosy as painted by F.D.R. in radio chat. . .

Think twice before you take up your prescription pad, advises Dr. Howard Dittrick in Cleveland Academy Bulletin . . . refresh your memory by consulting your books on therapeutics . . . cultivate frequent reference to the National Formulary . . . do your own thinking . . . don't be a Charlie McCarthy . . . Repeated revisions help to make a medical paper understandable, readable and interesting . . . Osler always made three drafts of a manuscript . . . Albutt four . . . Anatole France eight . . . simplicity and clearness are fundamental virtues . . . Membership of the State Association at present is 5,935 . . . sixty-five additional members needed for a mark of 6,000 and a new all-time record . . . there may be some eligible physicians in your county who should belong to your county society but don't . . . get them interested. . . .

French social reforms are a sad failure, says William F. McDermott of the Cleveland P. D. now junketing abroad . . . predicts this ought to mean something to U. S. but it probably won't . . . observes the great social problem is not to change the numbers on the bills but to increase production so that men will have work and the money will buy something . . . Physicians who are vulnerable to the "sue 'em" crowd, should carry personal liability insurance on their automobiles for larger sums than the average size policy . . . cost of extra coverage is relatively small. . . Harper Leech, Chicago Daily News columnist, ventures the opinion that opening the throttle of the American economic engine is needed more badly than socialized medicine . . do this, he says and the people will do like their daddies did . . . hire the doctor of their choice . . . Warning . . . when a patient rejects diagnostic X-ray examination, get him or her to sign a form releasing you from any and all liability for consequences arising from subsequent treatments. . . .

Believe it or not. . . . The Federal Government

poured $465,391,269 into Ohio under the emergency relief acts of 1935, 1936 and 1937, according to Treasury Department data. . . . This doesn't count what the doctor didn't get under pro-rating. . . . The proper school health program, or any other health program, requires the confidence and cooperation between all parties concerned with it, in the opinion of Henry Cook, M.D., president, Michigan State Medical Society . . . no disagreements . . . thorough knowledge of aims . . . program must be on ethical basis . . . else it will fail. . . . The physician who does business on a "one price for all" basis and makes no concession to the poor devil who can hardly afford shoes for his children is helping to sow the seeds of socialized medicine, observes the West Virginia Medical Journal . . . and he'll squawk the hardest when and if it comes. . . .

National Health Conference a big success, Miss Roche tells the reporters . . . the game's always a lot more fun when you hold the cards. . . . Fall is around the corner . . . meaning that medical society meetings will be starting soon. . . . Don't miss them . . . Things are popping. . . . Keep posted.

Medicine is a profession, the sole social reason for its existence being the service it can render humanity.—Irvin Abell, M.D., President, American Medical Association.

Heads I Win, Tails You Lose, Says Mr. Arnold

Although not one of the major points involved, one of the arguments raised by the Medical Society of the District of Columbia against the H.O.L.C. co-operative medical service plan was that by employing physicians on a salary the plan was an unfair restriction of competition among Washington physicians whose clientele includes large numbers of government employes.

Thurman Arnold, assistant U. S. attorney general, in his threats to prosecute medical societies (referred to elsewhere in this issue), charged that the medical profession is guilty of restraining free competition because it disciplined the salaried physicians of the H.O.L.C. medical service bureau.

On August 19, Mr. Arnold in a radio address made this statement:

"The department is not interested in group health or in any particular form of labor organization, or in the encouragement of any particular industry. It is only interested in insuring equal opportunity for all qualified persons to compete in either rendering services or selling goods excepting in those cases where Congress decides otherwise by special exception to the anti-trust laws."

So what?

When the H.O.L.C. plan tells its employes to go to its salaried physicians for medical services, instead of to physicians trying to live by private practice, the anti-trust laws are not violated, Mr. Arnold reasons. When the Medical Society of the District of Columbia makes a fight for physicians in private practice whose practice has been damaged through government intervention, the anti-trust laws are being violated, Mr. Arnold believes.

Clever chap—Arnold. He plays both ends against the middle and interprets the law to suit his convenience.

Which reminds us of the yarn about an experience of the late E. W. Scripps at the time he was in active control of his group of newspapers. Scripps wanted figures to support articles being prepared for one of the famous Scripps' crusades. He wired a statistician in Washington, D. C. for the data and received this reply:

"Which side are you on. Can supply figures to support either."

It is our business to see to it that the public does understand that we are not conservatives who wish to obstruct progress, but it is our sincere purpose, as it ever has been, to accelerate it. Milwaukee Medical Times.

Socialized Medicine— Is It Here or Is It on the Way?

A contributor to the "Letters to the Editor" department of a bulletin published by one of the larger Ohio academies of medicine (you may guess which one) has figured up that approximately 75 per cent of the physicians of that city receive all or a portion of their yearly income from sources financed by government funds or under conditions where there is third-party intervention between physicians and patient, or the pay for services comes from sources other than the patient.

Some readers of *The Journal* will refuse to believe that this percentage will apply throughout the state, despite the fact that large numbers of physicians must list in their income tax returns income derived from the care of wards or clients of the Federal and state governments, various political subdivisions, claimants under the Workmen's Compensation Act, beneficiaries of insurance companies, fraternal and benefit organizations, charitable societies, railroads, industry etc.

True or false; whether you agree or disagree, the deductions are interesting, as well as the conclusions drawn by the correspondent:

"Socialized medicine is here and closely insinuated in the practice of the majority of physicians. The time has passed, by at least twenty

years, to say whether a third agency shall intervene between doctor and patient, as for at least that interval have such agencies been an essential part of medical practice. Rather is it for us to plan under what circumstances and with what limitations the extension of the socialization of medicine shall be accepted."

Inter-State Postgraduate Assembly To Be Held in Philadelphia, October 31 to November 4; Program Reviewed

The Twenty-Third International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the public auditorium of Philadelphia, Pa., October 31, November 1, 2, 3 and 4, 1938. Hotel headquarters will be the Benjamin Franklin Hotel.

Members of the medical profession of Philadelphia are correlating for the clinics an abundance of hospital material representing various types of pathological conditions which will be discussed by the contributors to the program.

Approximately 80 distinguished teachers and clinicians will appear on the program, a tentative list of whom appears on page 1069 of this issue of The Journal. The subjects and speakers have been selected to include practically all the topics of greater interest to the medical profession in general. Subjects include: acute coronary occlusion; significance of low back pain; significance of jaundice; trauma of the larynx; postoperative complications; treatment of anemia; practical thyroid and pituitary therapy in problems of aberrant growth and development; wider usefulness of blood transfusions; obscure fevers as diagnostic problems; complications of pregnancy; diagnostic significance of pain; treatment of dehydration and edema; anterior poliomyelitis; clinical use of sulfanilamide in infectious diseases; immediate care of fractures; psychotherapy in general medicine; influenzal pneumonias and many others.

A full program of scientific and clinical sessions will take place every day and evening of the assembly, starting each morning at 8 o'clock On account of the fullness of the program, restaurant service will be available at the auditorium at moderate prices.

Members of the profession are urged to bring their wives with them as a very excellent program is being arranged for their benefit by the Ladies' Committee. Philadelphia has many places of historic and other interests, which will make this year's program especially attractive to them.

Pre-assembly and post-assembly clinics will be held in the Philadelphia hospitals on Saturday, October 29, and Saturday, November 5.

It is very important that hotel reservations be made early by writing Mr. Thomas E. Willis, chairman of the Hotel Committee, Chamber of Commerce Building, 12th and Walnut Sts., Philadelphia, Pa.

The association, through its officers and members of the program committee, extends a hearty invitation to all members of the profession in good standing in their state and provincial medical societies to attend the assembly. The registration fee is $5.

Officers of the Association include Dr. Elliott P. Joslin, Boston, Mass., president; Dr. William B. Peck, Freeport, Illinois, managing director and Dr. George W. Crile, Cleveland, president-elect and chairman of the program committee.

Ohio physicians scheduled to participate in the program are: Dr. Russell L. Haden, Dr. Robert S. Dinsmore, Dr. A. Carlton Ernstene, Dr. William E. Lower, Dr. Claude S. Beck, and Dr. Crile, Cleveland.

COMING MEETINGS

Ohio State Medical Association, Toledo, May, 1939.

American Medical Association, St. Louis, 1939.

American Association of Railway Surgeons, Chicago, Sept. 19-21.

American Association for the Study of Goiter, Washington, D. C., Sept. 12-14.

American College of Surgeons, New York, Oct. 17-21.

American College of Physicians, New Orleans, March 27-31, 1939.

American Congress of Obstetrics and Gynecology, Cleveland, week of Sept. 11.

American Congress of Physical Therapy, Chicago, Sept. 12-15.

American Hospital Association, Dallas, Sept. 26-30.

American Public Health Association, Kansas City, Oct. 25-28.

American Roentgen Ray Society, Atlantic City, Sept. 20-23.

Association of Military Surgeons of the United States and Canada, Rochester, Minn., Oct. 13-15.

Interstate Postgraduate Assembly, Philadelphia, Oct. 31-Nov. 4.

Reunion for Army-Navy Medics

A reunion for all former officers and enlisted men of the United States Army and Navy Medical Corps who attend the American Legion Convention in Los Angeles, September 19-22, is being planned. A luncheon is scheduled at the Cocoanut Grove of the Ambassador Hotel, Wednesday, September 21, at 12:30 o'clock. Colonel Charles W. Decker is chairman of the Medical Corps Reunion Committee, with headquarters in the Ambassador Hotel.

Do You Know - - -

Dr. Clarence D. Selby, Detroit, medical consultant for the General Motors Corporation, and former president of the Ohio State Medical Association, was installed as president of the American Association of Industrial Physicians and Surgeons at its annual meeting in Chicago recently.

* * *

The new research building of the Abbott Laboratories will be dedicated in the Abbott Auditorium, North Chicago, Illinois, October 7.

* * *

Richard Gordon, who played the doctor in "Birth of a Baby", has a similar role in "Portrait of Woman", produced exclusively for showing before female audiences in department stores throughout the country by S. H. Camp & Co., Jackson, Mich.

* * *

In order to impede the development of quack medicine which is widespread in Poland, the Polish government has forbidden any one without medical education to lecture on health or disease.

* * *

Among the additional hospitals recently approved by the Council on Medical Education and Hospitals of the American Medical Association, is Huron Road Hospital, East Cleveland, approved for a residency in anesthesia.

* * *

According to the statistical bulletin of The Metropolitan Life Insurance Company, the incidence of smallpox increased considerably in the United States during 1937. There were 11,806 cases reported during the year, as compared with 7,044 in 1936.

* * *

Recently elected officers of the American Institute of Homeopathy include: Dr. W. E. Allyn, Cleveland, president-elect; Dr. Lucy Stone Hertzog, Chardon, second vice-president, and Dr. Victor Laughlin, Cleveland, recording secretary.

* * *

There were 13,672 cases of whooping cough reported to the State Department of Health in 1937. One hundred and eighty-two deaths occurred as a direct result of whooping cough, and over 85 per cent of those who died from the disease were under one year of age.

* * *

Toledo has won high commendation from the United States Chamber of Commerce and the American Public Health Association for improvement in its public health program in 1937. In a recent contest sponsored by the organizations, Toledo was placed fifth in Group H cities and scored 714 out of a possible 1,000 rating.

Dr. Lee Humphrey, Malta, veteran member of the State Medical Board, was attending physician at the birth in McConnelsville of W. Lee O'Daniel, Democratic nominee for Governor of Texas.

* * *

City Solicitor Fred A. Ross, Ironton, recently held that a city is liable for medical expenses entailed by the wounding of a person by policemen during the discharge of their duty.

* * *

On the ground of insufficient evidence, the Pickaway County Common Pleas Court recently reversed the action of the State Medical Board in revoking the license of C. E. Bowers, Circleville, as a practitioner of mechanotherapy and chiropractic.

* * *

Speakers at the 1938 Annual Meeting of the Michigan State Medical Society, to be held at Detroit, Mich., September 20-22, include Dr. Russell L. Haden and Dr. A. D. Ruedemann, Cleveland.

* * *

At the recent session of Congress a bill was passed providing for the appointment of a dental officer as assistant to the Surgeon General of the U. S. Army and for an increase in the personnel of the Dental Corps.

* * *

All Jewish physicians in Germany are to be deprived of their licenses to practice after September 30. It is estimated that between 7,000 and 8,000 physicians will be affected by the Nazi order.

* * *

The Board of Regents of the University of Michigan has approved the erection of a $200,000 dormitory to accommodate 120 medical students. The building will be financed on a self-liquidating plan. The dormitory is expected to be ready for occupancy in September, 1939.

* * *

Ninety-eight and five-tenths per cent of the population of the United States lives within 30 miles of a hospital.

* * *

Dr. S. R. Gerber, Cleveland, is president of the National Association of Coroners which held its annual convention in St. Louis, August 29, 30 and 31.

* * *

Dr. Joseph C. Placak, Cleveland, is director-at-large of the National Tuberculosis Association for a two-year term.

* * *

Two cases of Rocky Mountain spotted fever were recently reported in Ross County.

LICENSES GRANTED 340 MEDICAL SCHOOL GRADUATES AT MEETING OF STATE BOARD HELD ON JULY 19

LICENSES to practice medicine and surgery in Ohio were granted 340 medical school graduates by the State Medical Board at its meeting in Columbus, July 19. Of these, 289 passed the June examinations; seven had passed the June, 1937, examinations and 44 were licensed through reciprocity with other states.

The Board also granted certificates to 18 osteopaths, 2 chiropractors, 16 mechanotherapists, 2 cosmetic therapists, 19 masseurs and 23 chiropodists.

The license of Dr. C. R. Buck, Cincinnati, which had been suspended since April 2, 1935, for violation of the Harrison Narcotic Act, was restored. The license of Dr. George L. McCullough, Chester, was suspended indefinitely for violation of the same act.

The definition for mechanotherapy and for electrotherapy were amended to exclude the use of X-ray or radium for therapeutic purposes.

Dr. Forest C. Hunter, Wapakoneta a graduate of Ohio State University College of Medicine, made the highest grade—90.3 per cent—in the June examinations. Dr. Louis Hait, Eclectic Medical College, Cincinnati, was second with 89.7 per cent, and Dr. G. W. Blanton, University of Cincinnati College of Medicine, and Dr. E. A. Votypka, Western Reserve University School of Medicine, were tied for third with grades of 88.7 per cent.

Those granted licenses to practice medicine and surgery after having passed the June examinations were:

OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

Walter H. Angerman, Massillon; William R. Arrowsmith, Scio; Charles W. Barch, Duvall; William C. Beck, Napoleon; Albert V. Black, Dayton; George H. Bonnell, Jr., Worthington; Charles G. Brown, Jr., Mansfield; Lee H. Brown, Hamilton; Robert R. Brown, Columbus; James M. Byers, Jr., Milledgeville; Herbert R. Cammerer, Dayton; Austin A. Coulson, Jr., Malta; Charles L. Critchfield, Troy; Thomas R. Curran, Columbus; Sol A. Danchik, Columbus; John W. Doering, Columbus; John A. Dole, Jr., Ironton; Thomas M. Edwards, Cincinnati; Doyt E. Farling, Cleveland; Robert C. Fox, Fremont; Robert L. Frazier, New Philadelphia; Mark A. Freedman, Bellaire; Carl F. Goll, Loudenville; John E. Grimm, Alliance; Paul E. Grimm, Columbus; George A. Hampton, Canton; Casper G. Harner, Lima; George E. Henderson, New Athens; Guilford B. Hoiston, Columbus; George K. Hughes, Columbus.

Forest C. Hunter, Wapakoneta; Howard M. Hunter, Hamilton; Robert M. Inglis, Columbus; Herbert M. Jacobs, Cleveland; Robert B. Jacobs, Xenia; George W. Jacoby, Ashland; Edward C. Jenkins, Akron; Albert M. Johnston, Marysville; Joseph M. Kaplan, Cleveland; Harry L. Katz, Cleveland; Herbert F. Kesinger, Wellston; Sol Klatman, Youngstown; Harlin G. Knierim, Columbus; Benjamin R. Koogler, Dayton; John A. Kramer, Batavia; Walter E. Kramer, Chillicothe.

William H. Lane, Newark; Henry T. Lapp, Columbus; Henry P. Limbacher, Cleveland; Frank T. Linz, Cincinnati; Duane D. M. Love, Sandusky; Robert S. McCleery, Columbus; Walter E. Martin, Versailles; Jack W. Miles, Columbus; Richard R. Miller, Canton; Harvey H. Murphy, Barnesville; Clyde W. Muter, Warren; Walter M. Ozawa, Columbus; Clarence G. Paisley, Old Washington; Rudolph W. Pedigo, Athens; George F. Peggs, Columbus; Earl E. Pinnell, Cleveland; Howard F. Polley, Columbus; Thomas K. Preston, Columbus; John A. Prior, Columbus; Joseph A. Ridgeway, Columbus; Robert S. Rosner, Dayton; James E. Rose, Wilmington; Raymond H. Schroeder, Columbus; William A. Schroer, Dayton; Howard M. Seitz, Wapakoneta.

William Shapero, Cleveland; Jack M. Sharp, Columbus; Juliet E. Stanton, Columbus; Gwyn H. Start, Toledo; Alvin J. Swingle, Columbus; John H. Thomas, Youngstown; Myrtle M. Thomas, Portsmouth; Karl S. Ulicny, Salem; Walter J. Urbanski, Lorain; Richard E. Vance, Columbus; Samuel L. Vinci, Cleveland; Paul H. Weaver, West Carrollton; Hall S. Wiedemer, Wadsworth; David A. Wilson, Columbus; Elizabeth I. Workman, Mt. Vernon; Harvey D. Wright, Columbus; Jack Yonchar, Cleveland; Harold C. Ziegler, Columbus; Edward M. Zucker, Columbus; Isadore I. Binzer, Toledo.

WESTERN RESERVE UNIVERSITY SCHOOL OF MEDICINE

Waldemar R. Agricola, Youngstown; Frank M. Barry, Cleveland; Ned F. Bauhof, Canton; Joseph H. Bolotin, Cleveland; George W. Campbell, Cleveland; Daniel J. Carothers, Cleveland; John E. Carter, Cleveland; Mollie Cholfin, Cleveland; Joseph F. Corsaro, Cleveland; Carr E. Dix, Columbus; Carroll C. Dundon, Cleveland; Arthur S. Dutton, Cleveland; Edward L. Dyer, Cleveland; Richard W. Eckstein, Cleveland; Howard H. Englander, Cleveland; William H. Falor, Akron; John S. Fish, Cleveland; Norma C. Furtos, Cleveland.

Jerome A. Gans, Cleveland; Albert J. Gilbert, Cleveland; Richard P. Glove, Cleveland; Regis F. Golubski, Cleveland; John J. Grady, Cleveland; Paul E. Halter, Cleveland; Alfred H. Hill, Cleveland; Robert J. M. Horton, Cleveland; Richard H. Jackson, Cleveland; Daniel G. Jarvis, Cleveland; Julien S. Jones, Cleveland; William B. Jones, Cleveland; Frederick C. Kluth, Cleveland; Henry R. Large, Cleveland; Leonard Lewin, Cleveland; Frank M. Lindsay, Niles; George G. Linn, Cleveland.

William W. Markley, Cleveland; William H. Maryanski, Akron; John R. Master, Cleveland; Charles A. McClelland, Akron; Peter C. Meister, Cleveland; Robert C. Miller, Uniontown; Randolph P. Moore, Lisbon; Donald N. Morgan, Cleveland; Wilmer O. Paul, Youngstown; Myron S. Owen, Youngstown; Alexander J. Pasterak, Jr., Cleveland; Robert R. Richards, Rocky River; Andrew T. Roskos, Cleveland; Philip L. Rossman, Cleveland; Wilda S. Sarver, Sidney; Paul J.

Schildt, Springfield; William L. Schlesinger, Cleveland; Clarence F. Schmitt, Canton; David W. Shallenberger, Cleveland; Robert E. Shipley, Cleveland; Simmons S. Smith, Cleveland; Douglas H. Stanton, Cleveland; Theodore L. Takacy, Cleveland; Edward A. Votypka, Cleveland; David P. Williams, II, Cleveland; William T. Wood, Cleveland.

UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE

Irwin C. Albert, Cincinnati; Nathan Aronoff, Cincinnati; Charles M. Barrett, Cincinnati; Kenneth E. Bennett, Youngstown; Gerald W. Blanton, Cincinnati; Garret J. Boone, Norwood; Lewis P. Brumm, Coldwater; Melville E. CaJacobs, Cincinnati; Clyde G. Chamberlin, Hamilton; Cataldo J. Coletti, Cincinnati; Marguerite M. Coutcher, Toledo; Robert M. Craig, Dayton; Philip B. deMaine, Cincinnati; Hugh S. Espey, Xenia; Joseph C. Flynn, Cincinnati; Narvel H. Foster, Gallipolis; David E. Frankel, Cincinnati; Abraham N. Franzblau, Cincinnati; Eugene P. Fromm, Cincinnati.

Irving A. Gail, Cincinnati; Robert L. Garber, Cleveland; James R. Hawkins, Cincinnati; Mortimer Herzberg, Jr., Cincinnati; George F. Jones, Otway; Jules I. Klein, Cincinnati; Calvin O. Koch, Lima; Carl W. Kumpe, Cincinnati; Irvin L. Libecap, Dayton; Harry L. Mackinnon, Springfield; Raymond Marr, Cincinnati; Isador Miller, Cincinnati; Morris Moel, Cincinnati; William L. Neal, Cincinnati; William U. Neel, Cincinnati; Edward N. Nelson, Cincinnati; Ray O. Nulsen, Cincinnati; Charles M. Oxley, Troy; Dwight C. Pettay, Cincinnati; Alexander K. Philipides, Campbell.

Joseph J. Podesta, Cincinnati; Mae G. Schissler, Toledo; John E. Schoenling, Cincinnati; Alfred G. Schulze, Cincinnati; Hans A. Schulze, Cincinnati; Paul C. Schumacher, Hamilton; Marcellus J. Schwegman, Cincinnati; Norman O. Shaftel, Cincinnati; George Sigman, Cincinnati; Nathan Silver, Cincinnati; Frederick S. Skeen, Cincinnati; Bertram L. Snyder, Cincinnati; Lewis R. Soloway, Cleveland; William E. Sovik, Youngstown; Mervin F. Steves, Cincinnati; Victor M. B. Strauss, Cincinnati; Elmo R. Uthoff, Perrysburg; Herman C. VanKirk, Greenville; Frederick W. Ward, Cincinnati; Charles T. Wehby, Cincinnati; Anna J. Weinstein, Cincinnati; Albert D. Weyman, Elmwood Place; Elsie M. K. Weyman, Elmwood Place; Jean P. Wozencraft, Cincinnati; Paul A. Wright, Cincinnati; Owen F. Yaw, Logan; Richard P. Zimmerman, Cincinnati.

ECLECTIC MEDICAL COLLEGE, CINCINNATI

Herman S. Alpert, Cincinnati; Charles J. Aria, Cincinnati; Irving H. Blaustein, Cincinnati; Louis Butan, Cincinnati; Anthony F. D'Amico, Cincinnati; Weldon E. Diller, Cincinnati; Robert J. Doernberg, Cincinnati; Samuel N. Feinsod, Cincinnati; Salvator T. Ferrari, Cincinnati; Martin M. Fischbein, Cincinnati; Leon C. Freed, Cincinnati; Morris Goldberg, Cincinnati; Sidney Gover, Cincinnati; Louis Hait, Cincinnati; Joseph B. Kallenberg, Cincinnati; Irwin Kaplan, Cincinnati; William A. Lee, Cincinnati; Paul E. Muncy, Cincinnati; Abraham Novinsky, Cincinnati; John F. Reitz, Cincinnati; Elliot N. Rosenberg, Cincinnati; Anthony J. Schilero, Cincinnati; Sidney J. Schreiber, Cincinnati; Irving A. Schultz, Cincinnati; Mortimer L. Schwartz, Cincinnati; Peter J. Simon, Cincinnati; Samuel B. Sonkin, Columbus; Max H. Teichholz, Cincinnati; Kemper N. Venis, Cincinnati; John L. Wagner, Cincinnati; James W. Ward, Cincinnati; David Yospur, Cleveland.

OTHER SCHOOLS

Marcus D. Burnstine, Columbus, University of Chicago; William H. Wheir, Cincinnati, Creighton University; Orlando W. J. Penner, Akron, College of Medical Evangelists; Leon F. Moldavsky, Cleveland, University of Illinois; Edward G. Siegfried, Chillicothe, Jefferson Medical College; Richard J. Bryant, Cleveland; Anton P. Huml, Youngstown, Willis J. Kirkbride, Toledo, Vincent J. Murray, Youngstown, Marquette University; Frank C. Andrus, Columbus, University of Minnesota; Clarence G. Faue, Newark, University of Minnesota; Riley E. Frush, Willard; Robert M. Morgan, Cleveland; Starling D. Steiner, Jefferson County; Arnold G. Wedum, Cincinnati, Northwestern University; Donald J. MacDonald, Cleveland, University of Pennsylvania; Harvey B. Fitz-Gerald, Stark County; Robert L. Graham, Alliance; Joe W. Howland, Columbus; Harry Kaufman, Youngstown; Edward K. Kloos, Cleveland; William R. Murlin, Cleveland; Frank M. Olrich, Alliance; University of Rochester; Emanuel C. Liss, Columbus, Rodney J. McKenzie, Cincinnati; William H. Orcutt, Cleveland, Rush Medical College; Anne Sazima, Cleveland, Woman's Medical College of Pennsylvania; John F. Lake, Columbus, McGill University, Montreal, Quebec, Canada; Charles S. Fine, Cincinnati, University of Toronto, Toronto, Ontario, Canada; Franz Gruenberg, Cleveland, Christian-Albrechts University, Kiel, Germany; Fritz Moellenhoff, Cincinnati, University of Freiburg, Freiburg, Germany; Eugene C. Stern, Cleveland, Georg-August University, Goettingen, Germany; Hans L. Spiro, Toledo, University of Giessen, Giessen, Germany; Hugo N. Stern, Amherst, University of Heidelberg, Heidelberg, Germany; Richard L. Meiling, Cleveland, University of Munich, Munich, Germany; Ernest Kohner, Cleveland, University of Prague, Prague, Germany; Sidney Selkovits, Youngstown, St. Mungo's College, Glasgow, Scotland; Michael M. Miller, Cleveland, University of Vienna.

The following individuals who passed examination in June, 1937, were also licensed: Frank T. Cultrona, Cleveland, George E. Fakehany, Toledo, Robert F. Linn, Cleveland, Robert P. Scott, Jr., Mansfield, Jerome S. Surdyk, Fremont, Loyola University; Paul E. Anzinger, Springfield, George W. Bascom, Toledo, Marquette University.

LICENSED THROUGH RECIPROCITY

Licenses through reciprocity with other states were granted the following:

John A. Alexander, Cleveland, Meharry Medical College; Conrad S. Baker, Lima, Yale University; Margaret R. Baker, Akron, University of Pittsburgh; Winston C. Baltzell, Byesville, University of Louisville; Alfred K. Bard, Cleveland, Rush Medical College; Henry E. Baum, Cleveland, Rush Medical College; Robert E. Cooke, Harrison, University of Louisville; Samuel L. Corbin, Springfield, Meharry Medical College; Alexander N. Davis, Dayton, University of Michigan; Ross D. Dickson, Toledo, University of

Kansas; Andrew J. Evans, Jr., Toledo, Meharry Medical College; Evan C. Fowler, Sebring, St. Louis University; Kenneth Fowler, Dayton, Rush Medical College; Charles E. Gerson, Dayton, St. Louis University; Nicholas J. Giannestras, Cincinnati, Tufts College Medical School; Philip S. Giber, Youngstown, Wayne University; Raymond J. Gray, Cincinnati, University of Pittsburgh; Jack Greenfield, Columbus, Duke University; Louis Guberman, Middletown, University of Berne Medical School; Barbara A. Hewell, Cincinnati, Vanderbilt Medical School; Benjamin C. Houghton, Columbus, State University of Iowa; Louis B. Katz, Dayton, St. Louis University; Lewis V. Kogut, Cleveland, Loyola University; Angelo Lapi, Canton, University of Buffalo; Joseph W. Lawrence, Cincinnati, State University of Iowa; Lawrence Lazarus, Cleveland, St. Louis University; Joseph F. Lembright, Alliance, Johns Hopkins University; Elmer T. McCune, Sebring, Wayne University; William Mendelsohn, Cleveland, Johns Hopkins University; John M. Moore, Piney Fork, Temple University; Frank C. O'Neil, Middletown, Harvard Medical School; Warren G. Parish, Cleveland, University of Pennsylvania; Luther H. Parr, Cincinnati, Vanderbilt Medical School; Donald C. Peters, Perrysburg, University of Louisville; Elton W. Recroft, Cleveland, University of Nebraska; Harold J. Reese, Youngstown, University of Michigan; Raymond S. Rosedale, Canton, University of Alberta; Maurice A. Schnitker, Toledo, University of Michigan; Edna W. Schrick, Oberlin, Washington University; Clark P. Searle, Cincinnati, Yale University; Aaron A. Shaper, Cincinnati, University of Louisville; Marvin G. Shipps, Cleveland, Temple University; Myrwood B. Sutton, Steubenville, Rush Medical College; Henry McNeil Ward, Xenia, Meharry Medical College.

New Journal on Legal Medicine

Dr. Frederick C. Warnshuis, president of the American Medico-Legal Association, has announced that the first issue of *The American Journal of Medical Jurisprudence*, of which he is editor-in-chief, will be published in September and monthly thereafter. The association plans to inaugurate direct research and studies in the field of legal medicine, devise uniformity in policies, standards and legislation in medico-legal matters and to assume leadership in educational movements which convey authentic information on the legal responsibilities and rights of medical, legal and dental members of the professions. Dues, which include a subscription to *The Journal of Medical Jurisprudence*, are a registration fee of $5, paid once, and annual dues of $10. The association headquarters are at 137 Newbury Street, Boston, Mass.

The Council of the Ohio State Medical Association has instructed the Headquarters Office to withhold mailing the Summary Blank for the A.M.A. Survey to county society secretaries until more copies of Form No. 1 (the individual physician's form) have been completed. Fill out your Form No. 1 and mail it TODAY.

Medical-Dental Military Institute In Cleveland, October 3-15

A Medico-Dental Military Inactive Status Training Course will be held at Cleveland during the two weeks of October 3-15. Eight Cleveland hospitals, Western Reserve University and the Cleveland Academy of Medicine are cooperating in a well-balanced professional program to be presented during the morning periods. Separate courses will be given for medical and dental officers. Military instruction during the afternoons and certain evenings will include special lectures, practical demonstrations of individual and organizational training, leadership and War Department training films. All Medical and Dental Reserve officers who satisfactorily complete the course will be granted 100 hours inactive duty training credits. Proportionate credit will be given for partial attendance. Inquiries as to registration, schedules and special hotel rates should be addressed to: Headquarters, Organized Reserves, 538 Federal Building, Cleveland.

Opinions of Attorney General

Among recent opinions of Attorney General Herbert S. Duffy are the following of particular interest to the medical profession:

No. 2684—A trustee of a district tuberculosis hospital who is a surgeon is not prohibited from accepting employment from outside sources, including counties of legal settlement of indigent patients, for the performance of operations upon patients of such hospital and being compensated therefor from such outside forces.

No. 2766—(1) A person receiving relief under the provisions of Am. S. B. No. 465 must have resided in the state of Ohio for three years and likewise resided in the county for a period of ninety days and this qualification applies to all relief recipients being furnished relief under this act regardless of their prior status and qualifications. (2) In cases where relief is being furnished by the respective subdivisions from their own moneys under authority of Sec. 3476 et seq., G. C., legal settlement in those cases must be in accordance with Secs. 3477 and 3479, G. C.

IN MEMORIAM

Fred Allison Bower, M.D., Uhrichsville; Ohio State University College of Medicine, 1925; aged 38; member of the Ohio State Medical Association and the American Medical Association; died July 25. Dr. Bower had practiced in Uhrichsville since 1926. He was a member of the Masonic Order, Knights of Pythias and the Presbyterian Church. Surviving are his widow, his mother and three sons.

Norman A. Burgess, M.D., Rock Creek; Cleveland College of Physicians and Surgeons, 1904; aged 59; former member of the Ohio State Medical Association and the American Medical Association; died August 8. Dr. Burgess practiced in Rock Creek for 33 years. He was a member of the Masonic Order, Eastern Star and the Methodist Church. His widow survives.

Caroline Lee Danford-Carson, M.D., Palo Alto, California; Ohio Medical University, Columbus, 1898; aged 66. An army nurse during the Spanish-American War, she was the widow of Dr. S. K. Carson. Two brothers survive.

Thomas A. Copeland, M.D., Athens; College of Medicine and Surgery, Ph.M., Chicago, 1887; aged 74; member of the Ohio State Medical Association and the American Medical Association; died July 9. Dr. Copeland practiced medicine for 52 years, 20 years in general practice in Shade and 32 years in Athens, specializing in eye, ear, nose and throat. For a number of years he maintained a hospital for his patients, this being the first hospital in Athens. Dr. Copeland was an active member of the Athens County Medical Society. Upon his retirement last year after 25 years of service as secretary, the society presented him with a key which he honored highly. He was intensely interested in military affairs, and during the World War served on the local examining board. Devoted to his profession, Dr. Copeland did considerable postgraduate study in New York, Vienna and Edinburgh. Surviving are his widow, a son, three daughters and five brothers.

Harry Simpson Davidson, M.D., Akron; Ohio Medical University, Columbus, 1897; aged 67; member of the Ohio State Medical Association; and the American Medical Association; died August 1. Dr. Davidson practiced in Akron for 40 years. Always active in the affairs of organized medicine, he was vice-president of the Summit County Medical Society in 1910 and president in 1911. From 1931 to 1935 he was Councilor for the Sixth District of the Ohio State Medical Association, and at the time of his death was a member of the Sub-Committee on Legislation of the Association. Dr. Davidson was coroner of Summit County from 1908 to 1912. During his service as a member of the House of Representatives from Summit County for three terms, 1920 to 1926, he actively opposed anti-medical legislation and sponsored stream pollution legislation and the Ohio permanent registration law. Dr. Davidson was in the service of the Medical Corps of the U. S. Army during the World War. He was an emeritus member of the Peoples Hospital staff. Two sons, three daughters and two sisters survive.

William C. Gill, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland. 1900; aged 63; former member of the Ohio State Medical Association and the American Medical Association; died August 3. Dr. Gill was active in the Ohio National Guard, having served as a sergeant in the Fifth Ohio Infantry in the Spanish-American War. He also saw service on the Mexican border in 1916. During the World War, he was a lieutenant-colonel in the Medical Corps, and received the French croix de guerre and the Belgian war cross. He practiced in Cleveland when not on military assignment. Dr. Gill was a member of the American Legion and the Cleveland Grays. Two sons, two daughters, a brother and a sister survive.

Joseph C. E. Fritch, M.D., Cleveland; Cleveland College of Physicians and Surgeons, 1896; aged 71; former member of the Ohio State Medical Association and the American Medical Association; died July 25. Dr. Fritch practiced in Cleveland for 42 years. He was a member of the staff of Lutheran Hospital.

George Foster Gourley, M.D., Steubenville; Ohio Medical University, Columbus, 1903; aged 59; member of the Ohio State Medical Association, the American Medical Association, and the American Academy of Ophthalmology and Oto-Laryngology; died June 28. Dr. Gourley had practiced in Steubenville since 1915. Prior to that time he practiced in Bradley and Smithfield. Active in the professional and civic life of his community, he was a director of the Chamber of Commerce, a member of the Masonic Order and the Presbyterian Church. His widow survives.

Carl Braun Groschner, M.D., Toledo; Jefferson Medical College of Philadelphia, 1897; aged 64; died July 28, of a self-inflicted wound. Ill health forced Dr. Groschner to retire in January, after having practiced in Toledo for 35 years.

Surviving are his widow, a brother and three sisters.

Edwin A. Hamilton, M.D., Columbus; Medical College of Ohio, Cincinnati, 1891; aged 73; member of the Ohio State Medical Association; Fellow of the American Medical Association and the American College of Surgeons; died July 31. Dr. Hamilton had practiced in Columbus since 1894. A former president of the Columbus Academy of Medicine, he had been on the teaching staff of the Ohio State University College of Medicine and its predecessor, Starling Medical College. In 1915 he was in charge of the Red Cross Hospital in Gleiwitz, in southeastern Germany, and the following year served on the Mexican border as a major in the Fourth Regiment of the Ohio National Guard Medical Corps. Dr. Hamilton was a trustee of Rio Grande College, a member of the Masonic Order, the Methodist Church, Phi Rho Sigma, Kiwanis Club and the Columbus Chamber of Commerce. Surviving are his widow, a son—Dr. Walter H. Hamilton, Columbus, a sister and an uncle.

John Cotton Henry, M.D., Athens; Jefferson Medical College of Philadelphia, 1929; aged 34; member of the Ohio State Medical Association and Fellow of the American Medical Association; died August 9. A son of the late Dr. J. L. Henry, he had practiced in Athens for seven years. Last year Dr. Henry was president of the Athens County Medical Society. He was a member of the Kiwanis Club, Elks, Masonic Order, the Methodist Church and Nu Sigma Nu. His widow, a daughter, his mother and a sister survive.

George L. Hines, M.D., Williamsburg; Medical College of Ohio, Cincinnati, 1882; aged 81; died July 15. Dr. Hines retired recently, after having practiced in Williamsburg for 55 years. He was a member of the Masonic Order. His son survives.

George W. Hous, M.D., Dayton; Medical College of Ohio, Cincinnati, 1877; aged 89; died August 7. Dr. Hous retired in 1911 after having practiced in Dayton 10 years, Clayton 23 years and Pyrmont one year. Surviving are his widow, two sons and two daughters.

William Harry Howley, M.D., College Corner; Miami Medical College, Cincinnati, 1885; aged 80; member of the Indiana State Medical Association and Fellow of the American Medical Association; died July 6. A son of a physician, the late Dr. A. D. Howley, also of College Corner, Dr. Howley had practiced in that community for 53 years. He was widely known in Eastern Indiana and Western Ohio. Dr. Howley was a member of the United Presbyterian Church, the Masonic Order, and the Lions and Century clubs. His widow and a son, Lt. Col. Paul R. Hawley, Medical Corps, U. S. Army, Carlisle, Pa., survive.

Leonard S. Krauss, M.D., Middletown; Ohio Medical University, Columbus, 1895; aged 86; former member of the Ohio State Medical Association and Fellow of the American Medical Association; died July 16. Dr. Krauss retired six years ago, after having practiced in Middletown since 1900. He had also been located in Germantown and West Carrollton. Surviving are his widow and a son.

Victor Leo Arthur Langenderfer, M.D., Toledo; University of Michigan Medical School, 1909; aged 51; member of the Ohio State Medical Association and Fellow of the American Medical Association; died August 7. He is survived by his wife, two daughters, one sister and five brothers.

Reuben E. Nyswander, M.D., Grand Rapids; Illinois Medical College, 1904; aged 60; died August 9. Dr. Nyswander had been located in Grand Rapids, Wood County, for 20 years. He also had practiced in Wapeton, N. D., and LaSalle, Ill. Dr. Nyswander was a member of the B.O.P.E. Surviving are his widow, two brothers and a sister.

Harry Sebastian Reger, M.D., Jamestown, N. Y.; George Washington University School of Medicine, 1904; aged 60; member of the New York State Medical Society; Fellow of the American Medical Association and the American College of Surgeons; died July 13. Dr. Reger formerely practiced in Ironton.

Najib Nassif Sallume, M.D., Toledo; Baltimore Medical College, 1896; aged 70, member of the Ohio State Medical Association and the American Medical Association; died July 1. Dr. Sallume came to Toledo, a political exile from his native Turkey in 1897. Born in Damascus he followed his father in the Presbyterian ministry, later becoming a teacher and a member of the Turkish diplomatic corps. Dr. Sallume was the first and perhaps the only Christian of his generation to receive military honors from the old regime in Turkey for the meritorius manner with which he discharged his duties as a military attache and envoy plenipotentiary in European and Asiatic courts. He was decorated several times by Abdul Hamid II, Sultan of Turkey. Later he became connected with the Young Turkey Party, and because he was in disfavor with the Turkish government was compelled to leave the country in 1895. Dr. Sallume was active in professional and Masonic circles in Toledo and was a member of the Methodist Church. He had two hobbies—the collection of oriental art treasures and the learning of languages, of which he read and spoke 16. Surviving are his widow, two brothers, one of whom—Dr. Tofiq S. Sallume—is a physician in Damascus, and two sisters.

Bonnard Teegarden, M.D., New York City; Eclectic Medical College, Cincinnati, 1926; aged

36; member of the New York State Medical Society and Fellow of the American Medical Association; died June 29, at Tucson, Arizona, while returning home from the A.M.A. meeting in San Francisco. Dr. Teegarden was a former resident of Ft. Thomas, Ky. For the past ten years he had practiced in New York. His parents, two brothers and five sisters survive.

William Balass Yoakley, M.D., Wilmington; Howard University College of Medicine, Washington, D. C., 1915; aged 64; member of the Ohio State Medical Association and the American Medical Association; died July 9. Dr. Yoakley was the first and only colored man to graduate from Wilmington College. After teaching school for six years, he was appointed to the staff of the Census Bureau in Washington, at which time he began the study of medicine. For the past 22 years he had practiced in Wilmington. Dr. Yoakley was a member of the Wilberforce F. & A. M. and the Methodist Church. His widow survives.

Charles R. Ziegler, M.D., Carrollton; Jefferson Medical College of Philadelphia, 1874; aged 88; member of the Ohio State Medical Association and the American Medical Association; died July 30. Dr. Ziegler was the oldest practicing phycian in Carroll County, having practiced for 64 years; 11 years in Chatfield, Crawford County, and 53 years in Carrollton. At the time of his death Dr. Ziegler was county physician, a post which he had held for 30 years. He was a former president of the Carroll County Medical Society. Dr. and Mrs. Ziegler celebrated their 61st wedding anniversary on November 9, 1937. He was a member of the Lutheran Church. Surviving are his widow and a daughter.

Board of Internal Medicine Exams

Written examinations for certification by the American Board of Internal Medicine will be held in various parts of the United States on Monday, October 17, 1938, and on Monday, February 20, 1939. Formal application must be reecived by the secretary before September 15, 1938, for the October, 1938, examination and on or before January 1 for the February, 1939, examination. Application forms may be obtained from William S. Middleton, M.D., Secretary-Treasurer, 1301 University Avenue, Madison, Wisconsin.

Cleveland—Dr. T. Wingate Todd, professor of anatomy, Western Reserve University School of Medicine, has just been elected president of the American Association of Physical Anthropologists, and vice-president of the American Association of Anatomists.

Meeting of Laboratory Directors and Serologists to be Held in Hot Springs, Arkansas, October 21-22

An Assembly of Laboratory Directors and Serologists will be held at Hot Springs National Park, Arkansas, October 21-22, under the sponsorship of the Committee on Evaluation of Serodiagnostic Tests for Syphilis of the United States Public Health Service, with Surgeon General Thomas Parran as chairman.

The aims and purposes of the assembly will be to consider means and methods to improve and to make more generally available the serologic tests, which are so important in syphilis control work.

Tentative arrangements call for the presentation of the program in four sections: First, consideration of the need for adherence to conventional technic in the routine performance of reliable serodiagnostic tests; second, training of laboratory personnel; third, discussion of the prosecution of the studies to evaluate the performance of serologic tests within the states, and fourth, consideration of the desirability of licensing or approving for the performance of serodiagnostic tests for syphilis, laboratories within the states by the respective state department of health.

Recommendations for each of the four sections will be drafted by a separate committee for presentation to the assembly.

Dr. Walter M. Simpson, Dayton, will be chairman of the first section, and Dr. Benjamin S. Kline, Cleveland, will present a paper at the meeting of that section.

An additional feature of the meeting will be an actual demonstration of the performance of the Eagle, Hinton, Kahn, Kline, and Kolmer tests by the originators of these procedures.

All laboratory workers from private, hospital and public health laboratories, as well as physicians and health officers interested in the control of syphilis, are invited to attend. Those interested in obtaining further information should write to the Surgeon General, U. S. Public Health Service, Washington, D. C.

Congress of Physical Therapy

The 17th annual scientific and clinical session of the American Congress of Physical Therapy will be held cooperatively with the 22nd annual convention of the American Occupational Therapy Association, September 12-15, at the Palmer House, Chicago. Preceding these sessions, the Congress will conduct an intensive instruction seminar in physical therapy for physicians and technicians, September 7-10. Details concerning the sessions may be obtained by addressing The American Congress of Physical Therapy, 30 North Michigan Ave., Chicago, Ill.

BUCKEYE NEWS NOTES

Akron—With a low gross score of 83, Dr. A. E. Davis successfully defended his title as golf champion of the Summit County Medical Society. Dr. D. C. Brennan was second with an 84.

Athens—Dr. C. H. Reed, superintendent of the Athens State Hospital, spoke on "Mental Diseases" at a recent meeting of the Jackson Rotary Club.

Bowling Green—Dr. H. J. Powell, Wood County health commissioner, was guest of honor at a party given recently by county employees in the Court House in celebration of his birthday.

Chardon—"Socialized Medicine" was the topic discussed by Dr. Lucy Stone Hertzog at a recent meeting of the Chagrin Falls Kiwanis Club.

Cincinnati—Officers of the Cincinnati Obstetrical Society are Dr. Edwin W. Enz, president; Dr.Wm. P. Gillespie, vice president, and Dr. Edward Friedman, secretary-treasurer.

Cleveland—Dr. Guy H. Williams, superintendent of the Lima State Hospital for the Insane, has been transferred as head of the Hawthornden State Hospital here.

Columbus—At a recent meeting of the Mercator Club, Dr. H. M. Clodfelter spoke on "Your Physical Complaints".

Conneaut—Dr. Harold Wilson was recently appointed chief surgeon for the Pittsburgh Steamship Company.

Dayton—Dr. J. K. Bailey has been named president-elect of the National Eclectic Medical Association.

Delphos—Dr. J. F. Ockuly is one of the new members of the Board of Trustees of DeSales College, Toledo.

Dover—Dr. and Mrs. D. H. Downey recently returned from a European trip.

Elyria—Friends of Dr. R. V. Gamble recently gave a party in honor of his 90th birthday.

Gallipolis—New members of the Medical Staff of the Ohio Hospital for Epileptics are Dr. W. W. Renner and Dr. B. R. Lauer, formerly of Columbus.

Leetonia—Dr. Paul H. Beaver was the speaker

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at a recent meeting of the Graduate Nurses' Association.

Lima—Three new resident physicians at Memorial Hospital are: Dr. M. V. Lingle, Eden; Dr. Paul Q. Peterson Carbondale, Ill., and Dr. J. W. Arnold, Ashland.

Mansfield—Five local physicians have taken up flying. They are: Dr. Frank H. Maxwell, Dr. Paul Stoodt, Dr. Myron S. Reed, Dr. Milton C. Oakes and Dr. L. D. Bonar.

Massillon—Dr. Seth Hattery, oldest Kiwanian in the United States, recently celebrated his 89th birthday and completed his 59th year in the practice of medicine.

Oberlin—Dr. F. R. Dew was chief of the medical staff at the Old Trails Jamboree attended by 2,700 Boy Scouts from five states at Marietta recently.

Ravenna—Dr. R. D. Worden, Portage County health commissioner since 1920, has resigned to devote full time to private practice.

Ripley—Dr. George P. Tyler, Sr., was injured at the horse show at Harrodsburg, Ky.

St. Marys—"State Medicine" was the subject of an address made by Dr. Guy E. Noble at a recent meeting of St. Paul's Men's Association.

Sandusky—At the annual outing of physicians, dentists and lawyers held recently at Put-in-Bay, plans were started for the formation of an organization of professional men in the city.

Sidney—Dr. Starling C. Yinger is leaving September 1 to enter the Graduate School of Medicine of the University of Pennsylvania for a course in otolaryngology. Dr. Frank S. Downey, formerly of Dillsboro, Indiana, has taken over Dr. Yinger's office in Sidney.

Spencerville—Dr. I. C. Stayner, practicing physician here for 30 years, has been appointed to the medical staff of the State Institution for Feeble-Minded at Apple Creek.

Springfield—At a recent meeting of the Urbana Lions Club, Dr. G. C. Ullery presented motion pictures of fishing and hunting scenes in Michigan and Alaska.

Strasburg—Dr. Clare W. Smith is convalescing from injuries received in an automobile collision in the Black Hills of South Dakota. Dr. George T. Matthews, Columbus, was injured in the same accident.

Youngstown—Radio addresses under the auspices of the Mahoning County Medical Society, were made by Dr. J. P. Kupec, Dr. P. H. Fusco and Dr. J. A. Altdoerffer during August.

Zanesville—Dr. Beatrice T. Hagen, Muskingum County health commissioner, explained the activities of her office and the duties of the county board of health at a recent meeting of the Optimist Club.



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Exams for Openings in Medical Corps of Navy Announced

The Medical Corps of the United States Navy offers a number of internships and commissions to graduates of Class "A" medical schools. Examinations will begin on November 7. Applications should be filed at least one month prior to that date.

Qualified candidates who have completed internships in civilian hospitals will be commissioned as assistant surgeons with the rank of lieutenant (junior grade) and assigned to the Naval Medical School, Washington, D. C., for a postgraduate course of instruction.

Senior medical students who qualify for appointments to internships in Naval Hospitals will be appointed acting assistant surgeons with the rank of lieutenant (junior grade) for temporary service during the intern year, and upon satisfactory completion of internship will be allowed to appear for competitive examination for permanent appointment. Should an intern desire to return to the practice of medicine in civil life, his appointment as an acting assistant surgeon will be terminated and he will be honorably discharged from the Naval Service.

Candidates must be United States citizens between the ages of 21 and 32 years at the time of appointment, and pass a physical and professional examination. Officers of the rank of lieutenant (junior grade) without dependents receive compensation of $2,699 per year, while those with dependents receive $3,158 per year. There are additional cash allowances.

Further particulars can be obtained by writing to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

CLASSIFIED ADVERTISEMENTS

Rates 50 cents per line, payable in advance. Minimum charge of $1.00 for each insertion. Price covers the cost of remailing answers. Forms close 16th of the month preceding publication.

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FOR RENT—Doctor's office in Clarksburg, Ohio, population 600, ideally situated 16 miles from Chillicothe, Circleville and Washington C. H. Two nice rooms with modern conveniences. Exceptional territory and location. Call or write Mrs. W. D. Jones, Clarksburg, Ohio.

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Eyelash Consignment Seized

The first seizure under the new Federal Food, Drug, and Cosmetic Act of June 25, 1938, was made by the U. S. Department of Agriculture recently when it seized a consignment of "Lash Lure the New and Improved Eyebrow and Lash Dye," manufactured by the Cosmetic Manufacturing Company of Los Angeles, California. The Government alleges that this product is adulterated in that it contains a poisonous or deleterious substance—a coal-tar preparation, paraphenylene diamine—which may make it injurious to users.

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GYNECOLOGY—Two Weeks Course starting October 10th. Gynecological Pathology by Dr. Schiller starting October 24th.

OBSTETRICS—Two Weeks Intensive Course starting October 24th. Informal Course starting every week.

FRACTURES & TRAUMATIC SURGERY—Informal Course every week; Intensive Formal Course starting October 3rd.

DERMATOLOGY & SYPHILOLOGY—Two Weeks Special Course starting September 19th. Clinical Course starting every week.

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RECENT ADVANCES IN THE SCIENCE OF NUTRITION

I. THE ROLE OF RIBOFLAVIN IN HUMAN NUTRITION

● In 1933, a series of articles on the vitamins was published, each article written by an authority in the field of nutrition. These papers served to summarize existing knowledge concerning these essential factors. During 1938 a similar series of articles has been issued. Comparison of related papers in these two series will indicate the most important advances in the science of nutrition which have been made in the course of the past five or six years.

In the first series of articles mentioned above, only two of the better known members of the old vitamin B complex received extended discussion (1). The more recent series, however, is characterized by the inclusion of a number of papers on riboflavin which, since 1932, has assumed a new significance in human nutrition (2). As compared with other factors with which it is often associated in nature, the rise of riboflavin to importance in human nutrition is somewhat anomalous.

For example, the effects upon humans of severe dietary deprivation of vitamin B_1 and the P-P factor are well known, in fact, such effects in themselves afford proof of the indispensable nature of these factors. While riboflavin is apparently concerned in cellular oxidation processes of mammals, the specific effect on humans of riboflavin deficiency is not known. Nevertheless, from the weight of evidence accumulated during the last five years, riboflavin is generally accepted as important in human nutrition. Authoritative opinion concerning riboflavin has been succinctly expressed as follows:

> "The fact that we do not know any specific human disease due to shortage of riboflavin is entirely compatible with the view that this substance is important in human nutrition. A detailed discussion of reasons for believing that riboflavin plays a role in the life process of the human as of other species would probably seem superfluous to a majority of readers at this date, and to a still larger majority in the future. Suffice it to point out that our species has evolved in the direction not of shortening the list of things it needs but of lengthening the list of things it can use to advantage." (2c)

Chemically, riboflavin is described as 6, 7 dimethyl-9 (d-l' ribityl) iso-alloxazine; a yellow-green, heat-stable pigment enjoying wide distribution in the plant and animal kingdoms. Many foods, therefore, of both plant and animal origin supply valuable amounts of this essential factor, specifically, fruits, vegetables, particularly the leafy pigmented types, and animal products such as milk and dairy products, meats, liver, and fish. It may, perhaps, be too early to estimate the daily human requirement for riboflavin. However, one rather liberal recommendation lists 600 units* as required daily by older children and adults; the estimated riboflavin requirement for younger children is somewhat less (2c).

In view of the above facts, attainment of an adequate intake of riboflavin would appear to be best insured by a varied dietary regime which includes the so-called "protective" foods. In the formulation of such diets, commercially canned foods may be particularly valuable. The older "vitamin G" assays —which are now known to measure principally the riboflavin contents of foods—indicate that modern canning procedures are without significant effect upon riboflavin. In addition, many foods valued for their contribution of this factor are canned commercially and hence are conveniently available at all seasons on practically every American market. Therefore commercially canned foods may be freely used in arranging such protective diets and they should materially assist in providing an adequate supply of this newly recognized dietary essential, riboflavin.

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*Bourquin-Sherman.

1. 1932. J. Amer. Med. Assn. 98, 2201 and 2283
1932. Ibid. 99, 26 and 121.
2a. 1938. J. Amer. Med. Assn. 110, 1105.
b. 1938. Ibid. 110, 1188.
c. 1938 Ibid. 110, 1278.

This is the fortieth in a series of monthly articles, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research. We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.

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ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

A meeting of the Adams County Medical Society was held at the Mineral Springs Hotel, Mineral Springs, Wednesday, August 24. Dr. J. G. Inman, Manchester, spoke at the morning session on "Tonsillectomy". Dr. T. I. Lawwill, Seaman, was the discussant. Papers presented in the afternoon were: "Herpes Zoster", by Dr. Sam Clark, Cherry Fork, with discussion lead by Dr. O. T. Sproull, West Union; "Immunilogical Procedures in Children", by Dr. Otto K. Engelke, West Union, discussed by Dr. W. L. Faul, Sr., Russellville.—O. T. Sproull, M.D., secretary.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

GREENE

At a meeting of the Greene County Medical Society, Thursday, August 4, at Xenia, Dr. Ben R. McClellan was appointed to represent the society on a committee from other medical societies to arrange a memorial to Dr. John Hole, the first doctor of medicine in the Miami Valley.

Dr. D. W. Hogue, Councilor for the Second District, spoke on "Observations of the Practice of Medicine in the British Isles". He brought back a favorable report, both as to physicians and patients, of the actual working of the British system of compulsory insurance against sickness and disability.

The society instructed President R. R. McClellan to write a letter to Dr. Walter H. Hartung, State Director of Health, criticising him for using his office for political purposes.—Donald F. Kyle, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

OTTAWA

In commemoration of his having completed 50 years in the practice of medicine, Dr. F. S. Heller, Oak Harbor, was presented with a gold plaque by members of the Ottawa County Medical Society,

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OCTOBER 31, NOVEMBER 1, 2, 3, 4, 1938.

Pre-Assembly Clinics, October 29; Post-Assembly Clinics, November 5, Philadelphia Hospital

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Chairman Program Committee, Dr. George W. Crile; Managing-Director, Dr. William B. Peck
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Intensive Clinical and Didactic Program by World Authorities

The following is a major list of members of the profession who will take part on the program:

Alfred W. Adson, Rochester, Minn.
W. Wayne Babcock, Philadelphia, Pa.
Robert M. Bartlett, Ann Arbor, Mich.
Claude S. Beck, Cleveland, Ohio
George Blumer, New Haven, Conn.
Peter T. Bohan, Kansas City, Mo.
William F. Braasch, Rochester, Minn.
Richard B. Cattell, Boston, Mass.
Henry A. Christian, Boston, Mass.
Arthur C. Christie, Washington, D. C.
Louis H. Clerf, Philadelphia, Pa.
William Cone, Montreal, Canada
John S. Coulter, Chicago, Ill.
Dr. Edward D. Churchill, Boston, Mass.
George W. Crile, Cleveland, Ohio
Elliott C. Cutler, Boston, Mass.
Walter E. Dandy, Baltimore, Md.
William Darrach, New York, N. Y.
Vernon C. David, Chicago, Ill.
Loyal Davis, Chicago, Ill.
Robert S. Dinsmore, Cleveland, Ohio
Claude F. Dixon, Rochester, Minn.
Nicholson J. Eastman, Baltimore, Md.
Edmond M. Eberts, Montreal, Canada
Eldridge L. Eliason, Philadelphia, Pa.
Charles A. Elliott, Chicago, Ill.
William H. Erb, Philadelphia, Pa.
John F. Erdman, New York, N. Y.
A. Carlton Ernstene, Cleveland, Ohio
Clarence B. Farrar, Toronto, Canada
John C. Gittings, Philadelphia, Pa.
Russell L. Haden, Cleveland, Ohio
William D. Haggard, Nashville, Tenn.
Samuel F. Haines, Rochester, Minn.
George A. Harrop, New York, N. Y.
Charles G. Heyd, New York, N. Y.
Fred J. Hodges, Ann Arbor, Mich.
Chevalier Jackson, Philadelphia, Pa.
Chevalier L. Jackson, Philadelphia, Pa.
Elliott P. Joslin, Boston, Mass.
Frederick J. Kalteyer, Philadelphia, Pa.
Floyd E. Keene, Philadelphia, Pa.
Herman L. Kretschmer, Chicago, Ill.
Frank H. Lahey, Boston, Mass.
Dean Lewis, Baltimore, Md.
Walter I. Lillie, Philadelphia, Pa.
Perrin H. Long, Baltimore, Md.
Warfield T. Longcope, Baltimore, Md.
William E. Lower, Cleveland, Ohio
Charles W. Mayo, Rochester, Minn.
Irvine McQuarrie, Minneapolis, Minn.
James H. Means, Boston, Mass.
Arthur R. Metz, Chicago, Ill.
William S. Middleton, Madison, Wis.
John J. Moorhead, New York, N. Y.
George P. Muller, Philadelphia, Pa.
Clay Ray Murray, New York, N. Y.
John H. Musser, New Orleans, La.
Howard C. Naffziger, San Francisco, Cal.
Frank R. Ober, Boston, Mass.
Eric Oldberg, Chicago, Ill.
Oliver S. Ormsby, Chicago, Ill.
Hubley R. Owen, Philadelphia, Pa.
Wilder Penfield, Montreal, Canada
George E. Pfahler, Philadelphia, Pa.
Fred W. Rankin, Lexington, Ky.
Robert F. Ridpath, Philadelphia, Pa.
David Riesman, Philadelphia, Pa.
Leonard G. Rowntree, Philadelphia, Pa.
Thomas H. Russell, New York, N. Y.
E. Kost Shelton, Los Angeles, Cal.
Fred M. Smith, Iowa City, Iowa
Marius N. Smith-Petersen, Boston, Mass.
Alfred Stengel, Philadelphia, Pa.
Cyrus C. Sturgis, Ann Arbor, Mich.
Robert G. Torrey, Philadelphia, Pa.
William G. Turner, Montreal, Canada
Professor von Eicken, Berlin, Germany
Waltman Walters, Rochester, Minn.
G. Harlan Wells, Philadelphia, Pa.
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at a dinner-meeting at Danbury, Thursday night, July 21. Dr. George A. Boon made the presentation.—News clipping.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

TUSCARAWAS

Dr. Robert E. Wolf, Uhrichsville, spoke on "Abdominal Sepsis", at a meeting of the Tuscarawas County Medical Society, Thursday night, July 14, at Twin City Hospital, Dennison.

At a meeting of the society, Thursday night, August 11, at the home of Dr. Mary E. Rowland, Gnadenhutten, W. A. White, Jr., Canton, discussed the progress of the survey of medical care in Stark County.—News clipping.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

GUERNSEY

At the regular bi-monthly luncheon meeting of the Guernsey County Medical Society, Thursday, July 20, at the Berwick Hotel, Cambridge, Dr. Frank C. McClanahan, now on furlough, gave a very interesting talk on his experiences in Ethiopia.

Dr. Philip T. Knies, Columbus, spoke on "Gastroscopy" at the session, Thursday noon, August 4.—O. Reed Jones, M.D., correspondent for *The Journal*.

Movie on Tuberculosis Available

A sound motion picture entitled "Diagnostic Procedures in Tuberculosis" has been produced by the National Tuberculosis Association for presentation before medical societies and allied groups. Physicians appearing in this interesting symposium are Dr. Kendall Emerson, managing director of the National Tuberculosis Association; Dr. Ralph S. Muckenfuss, director, Bureau of Laboratories, New York City Department of Health; Dr. Esmond R. Long, director, Henry Phipps Institute, and Dr. Mayer, assistant professor of medicine, Cornell University Medical School. Dr. Emerson demonstrates how sputum is stained and examined for the presence of the tubercle bacillus, close-up pictures showing each step clearly. The tuberculin test by the intracutaneous method is explained by Dr. Long. A series of X-ray films are shown and interpreted by Dr. Mayer. Summing up, Dr. Emerson, uses a diagram which shows the correlation between early diagnosis and prognosis.

The film is available in sound only, in 16 m/m and 35 m/m sizes. The running time is about 25 minutes. County medical societies wishing to obtain this sound motion picture should address the Ohio Public Health Association, 1575 Neil Avenue, Columbus.

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2. An approved course in physical therapy of not less than nine months, following graduation from a school of nursing or physical education which meets the requirements of the individual states.

These requirements have been approved by the Council on Medical Education and Hospitals of the American Medical Association. The object in having these qualifications for membership is to provide for the hospitals, schools for crippled children, and offices of physicians, trained physiotherapists who are able to follow the physicians' orders intelligently and thoroughly.

One of the purposes of the American Physiotherapy Association is to cooperate with and work only under the prescription of members of the medical profession.

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Training Course for Army Reservists at Mayo Medical Center, Oct. 3-15

The Tenth Annual Inactive Status Training Course for Medical Department Reservists of the Army and Navy will be held at the Mayo Foundation, Rochester, Minnesota, October 3-15.

The general plan of former years will be followed. Special work in clinics and hospitals will be offered during the morning hours for those asking special assignments. Presentations of carefully selected subjects in military medicine are scheduled for the morning, afternoon and evening hours.

The school program for the last three days of the meeting, October 13, 14 and 15, is merged with that of the Association of Military Surgeons of the United States. The Surgeons General of the Army, the Navy and the Public Health Service will attend.

All Medical Department Reservists are eligible for enrollment. Approved applicants will be enrolled upon the recommendation of the Surgeon of the Seventh Corps Area or the Surgeon of the Ninth Naval District. Applications should be made at an early date and should be forwarded through the respective Reserve headquarters of the officer concerned.

Willett-Rowekamp Decision

The Ohio Supreme Court on August 3 upheld the Court of Appeals of Hamilton County in ordering a new trial in the case of Evelyn Willett vs. Katherine Rowekamp, an unlicensed chiropractor, in an action for damages for injuries alleged to have resulted from undue and unusual force and violence during treatment, and in failure to take X-rays.

In the original action in the Hamilton County Common Pleas Court, Judge Stanley Struble ordered a verdict for the defendant on the ground that negligence had not been proved. In this trial Judge Struble excluded doctors of medicine as expert witnesses, claiming they were unfamiliar with chiropractic practice.

The Hamilton County Court of Appeals ordered a new trial. (May, 1937, issue *Ohio State Medical Journal*, pages 566-567.) This decision was upheld by the Supreme Court, but only on one count, namely, that the plaintiff had grounds for an action for damages because X-ray was not used in the diagnosis. The Trial Court was upheld in its opinion that the fact that the chiropractor was unlicensed would not in itself allow the patient any right for recovery for alleged injuries, and that doctors of medicine could not qualify as expert witnesses in a case involving chiropractic treatment unless they admit familiarity with chiropractic methods.

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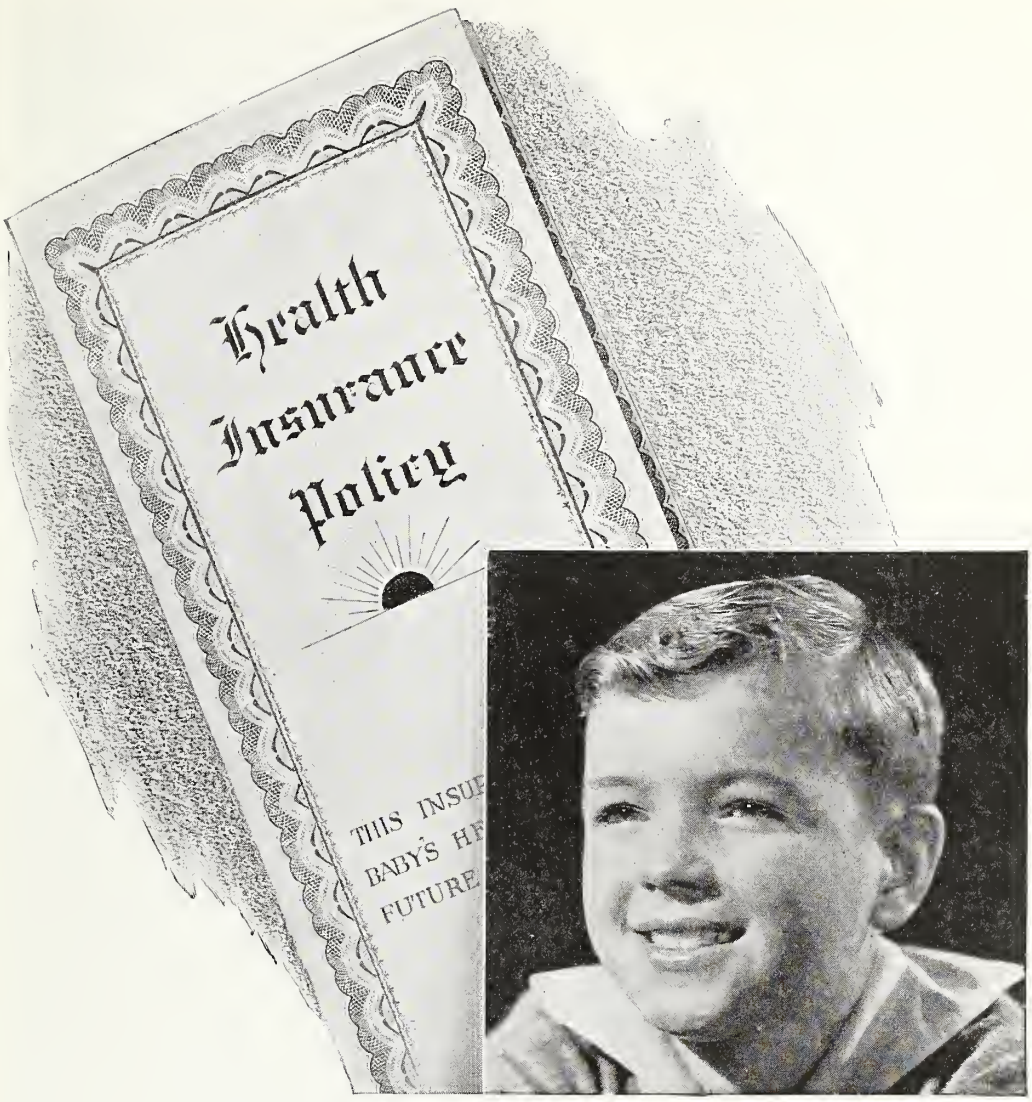
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Almost Half of Births Today Are Taking Place in Hospital

The hospital is replacing the home as the place of birth of American children, according to an analysis published in the Statistical Bulletin of the Metropolitan Life Insurance Company. In 1936 about 880,000 babies in the United States, or more than 40 per cent of the total born alive, and 44 per cent of the white babies, were delivered in hospitals.

The geographic distribution of hospitalized births naturally varies in different sections of the United States. In urban areas about 72 per cent of the births in 1936 were hospitalized, whereas in rural areas the figure was only 14 per cent. In urban Ohio, 66.5 per cent of births were in hospitals. In rural districts only 9.0 per cent of the births were in hospitals. It is to be noted, however, that the actual difference in the proportion of hospitalized births between urban and rural areas is less than the figures indicate, inasmuch as they are not corrected for residence. The number of births in urban hospitals is swelled by the common practice by women in rural areas of going to a neighboring city hospital to be confined.

In urban areas the highest proportion of births in hospitals is recorded for a group of Mountain and Pacific Coast states. In Nevada the percentage is 93, in both Montana and Oregon it is 91, in Idaho 89, and in Washington 88. At the bottom of the list are West Virginia, with 46 per cent of the urban births hospitalized; Kentucky with 45, New Mexico with 42, and New Hampshire with 35. These four states are the only ones which show less than one-half the white births in urban areas delivered in hospitals.

Related to the question of place of birth is that of person in attendance at birth. In all but a small proportion of cases, both at home and in hospitals, white children are ushered into the world by a physician. In urban areas 98 per cent of white children are delivered by physicians; in rural areas 92 per cent. The fact that doctors attend such an overwhelming proportion of confinements places them in a key position in the campaign to reduce maternal and infant mortality.

New York Graduate Fortnight

The Eleventh Annual Graduate Fortnight of the New York Academy of Medicine will be held at New York, October 24 to November 4. Clinical programs will be presented in various hospitals. Evening sessions will be held at the headquarters of the Academy. The subject to be discussed at this year's session is "Diseases of the Blood and Blood-Forming Organs". The registration fee is $3. Additional information concerning the meeting can be obtained by addressing the Academy, 2 East 103rd Street, New York, N. Y.

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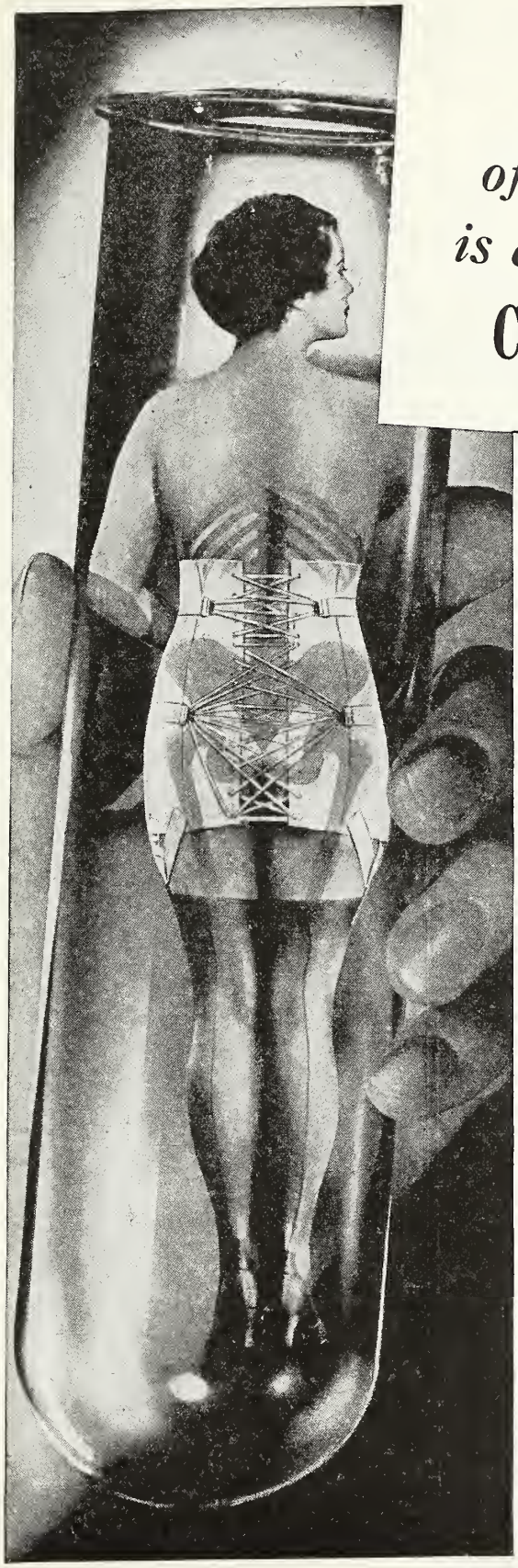
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Cupid's Victims

Recent marriages of Ohio physicians include the following: Miss Elizabeth E. Dennis and Dr. Harry T. Glaser, Zanesville; Miss Nell Kathryn Jones and Dr. Marshall O. Alexander, Dayton; Miss Jean Brown and Dr. Malcolm E. Switzer, Columbus; Miss Lucie McLaurine Pickett and Dr. Harold H. Klinger, Cuyahoga Falls; Miss Lucille Shoop and Dr. Robert E. Shipley; Miss Dorothy Longbrake and Dr. Edward C. Jenkins, Baltimore, Md.; Miss Mary L. Morrical and Dr. Maurice H. Weinstein, Middletown; Miss Helen Petzinger and Dr. Merritt K. Marshall, Findlay; Miss Marie Alberta Nelson and Dr. John J. McDonough, Youngstown; Miss Dorothy M. Deibler and Dr. Richard C. Wenrick, Winchester; Miss Mary Elizabeth White and Dr. Richard F. Miller, Lima; Miss Dorothy Mary Cantwell and Dr. Ned Darst Shepard, Dayton; Miss Ethel Maude Airey and Dr. O. Willard Hoffman, Franklin; Miss Nancy Chancellor and Dr. Jack Kinell, Cleveland; Miss Ellen Belle Chatham and Dr. Robert E. Heinle, Cleveland; Miss Eleanor Hagman and Dr. William McElroy, Youngstown.

New Nurse Practice Act in N. Y.

After July 1, 1940, all persons who wish to practice nursing in the State of New York must be licensed, under the provisions of the new Nurse Practice Act which became effective July 1, 1938. Nurses now practicing but not licensed are granted two years' time in which to become licensed.

Two classes of licenses will be issued: one to practice as a registered professional nurse and one to practice as a practical nurse. Applicants for R. N. licenses must be graduates of a school of nursing approved by the New York State Department of Education. Those who wish to be licensed practical nurses must have completed the eighth grade or its equivalent and must be graduates of registered schools for practical nurses which give at least a nine months' course in practical nursing. A special waiver, effective from July 1, 1938, to July 1, 1940, provides for the licensing of trained attendants and of those who have rendered satisfactory service over a given period of time.

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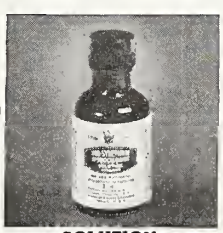
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Railway Surgeons' Meeting

The 23rd annual meeting of the American Association of Railway Surgeons will be held at the Palmer House, Chicago, September 19 to 23. Membership in this association includes railroad surgeons of practically every railroad company in the United States, although all physicians are invited to attend. There will be no registration fee for physicians who are non-member guests. Complete information regarding the program and the meeting may be secured by addressing Mr. A. G. Park, Convention Manager, the American Association of Railway Surgeons, Palmer House, Chicago, Ill.

Physical Therapy Meeting

The 17th annual scientific and clinical session of the American Congress of Physical Therapy will be held cooperatively with the 22nd annual convention of the American Occupational Therapy Association, September 12, 13, 14, and 15, 1938, at the Palmer House, Chicago. Preceding these sessions, the Congress will conduct an intensive instruction seminar in physical therapy for physicians and technicians—September 7, 8, 9, and 10. Information concerning the convention and the instruction seminar may be obtained by addressing: The American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago.

American Board of Anesthesiology

The American Board of Anesthesiology, Inc., an affiliate of The American Board of Surgery, was organized in response to many requests to establish official recognition of physicians competent to practice and teach anesthesiology as a specialty. This Board, through its affiliations with the American Board of Surgery, is a member of the Advisory Board for Medical Specialties.

Two groups of candidates are recognized for qualification by the board: (a) those who have already amply demonstrated their fitness as trained specialists in anesthesiology, the Founders' Group, and (b) those who, having met the general and special requirements exacted by the board, successfully pass its qualifying examination.

All applications for the Founders' Group must be received by January 1, 1939. No candidate will be considered after that date.

The board held its first examination at various points in the United States and Canada, during July, 1938. Another examination will be held in New York City, October 21, 1938.

Requests for booklets of information and application blanks should be addressed to the secretary, Dr. Paul M. Wood, 745 Fifth Avenue, New York City.

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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐ N. Y. State Jour. Med., 1935, 35-No. 11, 590 ☐

Laryngoscope, 1935, XLV, 149-154 ☐ Laryngoscope, 1937, XLVII, 58-60 ☐

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THE PHYSICIAN'S BOOKSHELF

Medical Writing: The Technic and the Art. By Morris Fishbein, M.D., editor of *The Journal of the American Medical Association*, $1.50. American Medical Association Press, 1938; pp. 212.

This book which is essentially a revision of the former book, "The Art and Practice of Medical Writing," contains so many valuable suggestions that any physician who proposes to write a paper upon a medical subject should study the text most carefully. If this is done, most papers will have a greater interest to the reader and our medical journals will be able to accomplish the purpose for which they have been maintained.

The New International Clinics: Original Contributions: Clinics: and evaluated reviews of current advances in the medical arts. Edited by George M. Piersol, Vol. 2, N.S.I. $3.00. Philadelphia, Montreal, New York. J. B. Lippincott Company, 1938; pp. 316.

This volume contains 15 original contributions, 56 pages of clinics and a review of Regional Ileitis. Eugéne St. Jacques' article on "A New Treatment of Acute Infections—Anthracotherapy" has been reviewed in a recent issue of Time magazine. Of particular interest is a 43 page article on "Sacro-Iliac Joint Pain—Anatomy, Motility, and Treatment by Manipulation" by Horace Gray, professor of medicine at Stanford University. In this unusual article Gray presents very forcefully and plausibly the use of osteopathic manipulation in this distressing and frequent complaint. His own and the results of others in a large series have varied from 82 per cent to nearly 100 per cent immediate relief.—R. C. Kirk, M.D.

Tales of a Waste Basket Surgeon. By Gordon S. Seagrave, M.D. $1.50. The Judson Press, Philadelphia, Pa., 1938; pp. 265.

The author, who was graduated from Denison University and Johns Hopkins Medical School, has been in charge of Harper Memorial Hospital at Nankham, Burma, since 1922. He is already well known for his book, "Waste Basket Surgery" in which he set forth the story of using surgical instruments salvaged from the scrap-pile of an American hospital to carry on the work of his hospital. This work has a similar theme. It is



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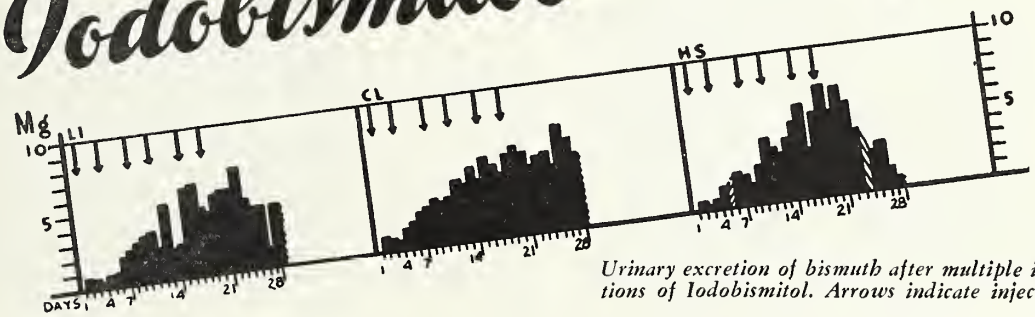
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[1] Sollmann, T., Cole, H. N., Henderson, K., *et al.: Amer. J. Syph., Gon. & Ven. Dis.* 21:480 (Sept.), 1937.

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Pavlov and His School. By Professor Y. P. Frolov, M.D., member of the All Union Institute of Experimental Medicine, Moscow. Translated by C. P. Dutt. $4.00. Oxford University Press, New York, 1938; pp. 291.

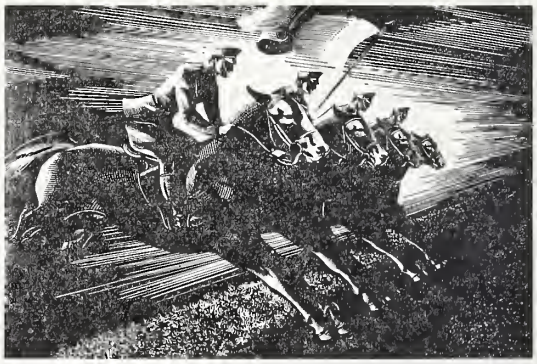
This book is recommended because it gives a clear and concise account of the theory of conditioned reflexes demanding no great amount of technical knowledge; also because it gives an account of the work of Pavlov's predecessors not generally known; and finally because it is more personal than previous books on the subject. A great book about a great man.

Textbook of Physiology. By William D. Zoethout, Ph.D., professor of physiology in the Chicago College of Dental Surgery. $4.00; revised sixth edition. C. V. Mosby Company, St. Louis, 1938.

It is the announced purpose of the author to provide comprehensive, up-to-date information in a clear understandable way. That this is the sixth edition bespeaks for his success. This edition contains much new material on the hormones, vitamins and the circulatory system. It is a general textbook and as such can be heartily recommended.

A History of Women in Medicine. By Kate Campbell Hurd-Mead, M.D. $6.00. The Haddam Press, Middletown, Conn., 1938; pp. 569.

From an interest which William Osler implanted in her heart in the historical club of Johns Hopkins Hospital in 1890, has grown this and a promised second volume. This complete volume covers the role of women in medicine from the earliest times to the beginning of the nineteenth century. Although there is evidence of high scholarship in every page, the book is written in a fascinating style. In tracing the history of women healers down through the ages, the author gives us many fascinating facts which deal with lives, places, and personalities not known to most of us here in Ohio. For instance, did you know that ancient Egypt boasted a fine woman's college on the Nile in which gynecology and obstetrics were specialties and where even the professors were women? I did not. Every library should have a copy as a contribution to



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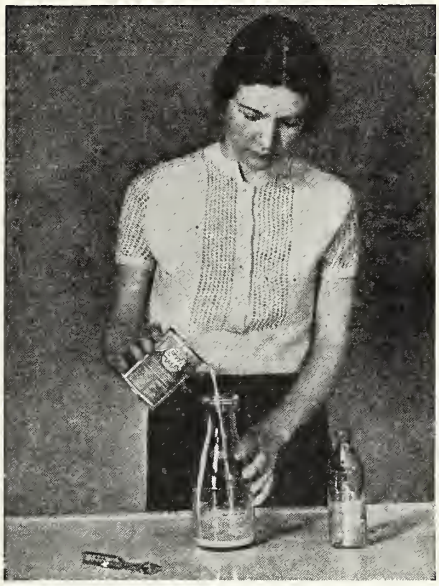
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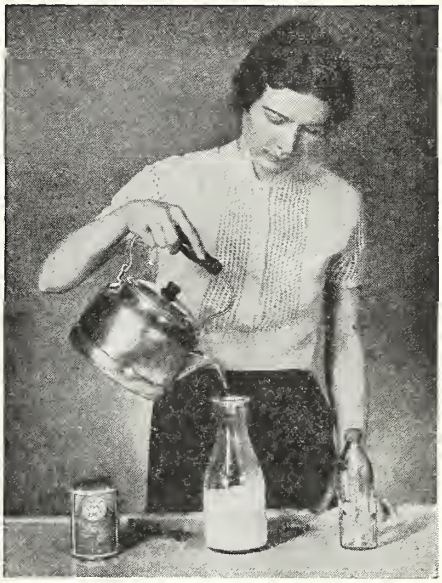
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the history of women. We who are interested in medical history are most grateful to its author for giving us this complete readable story of the part women have played as healers.

The Cerebrospinal Fluid. By H. Houston Merritt, M.D., and Frank Fremont-Smith, M.D. W. B. Saunders Co., Philadelphia. 1937.

Out of the cerebrospinal fluid laboratory at Boston City Hospital during the past fifteen years have emanated the most comprehensive studies on the spinal fluid which have been made in America. Together with Dr. Ayer, the authors have published a large number of papers on its chemistry and pathologic physiology, with which every neurologist is well acquainted. The substance of these papers is incorporated into this book. A large table insert conveniently shows the typical findings in the spinal fluid of important clinical entities where diagnosis rests largely on such findings.

Among the rarer "spinal fluid syndromes" presented in detail are those of malta fever, yeast meningitis, herpes zoster, pemphigues, benign lymphocytic meningitis and zanthomatosis.—Louis J. Karnosh, M.D.

Must You Have Hay Fever? By Bruce McCann. $1.00. Rodale Press, Emaus, Pa., 1939; pp. 88.

This volume is intended as a manual for the victim of hay fever. The author has compiled the answers to some 20 questions which the sufferer usually asks. The method which is reasonably successful here is an innovation and could if adopted become as dangerous as the questionnaire method of research. The answers have been compiled from 1,000 newspaper clippings. The men, quoted however, are usually authorities. One sentence stands out in the reviewer's mind as destined to become a classic, "Cut the weeds for the beauty of the landscape, for traffic safety, for exercise, if you will; to nibble at them as a hay-fever palliative is the period after the last letter in futility."

Youth and Sex. A Study of 1300 College Students. By Dorothy Dunbar Bromley and Florence Haxton Britten. $3.00. Harper Brothers, New York; 1938; pp. 303.

These two trained newspaper women constituted themselves a fact-finding committee and with the help of Raymond Pearl, Dr. R. L. Dickinson and others drew up a sound plan of work. This volume is the result of their investigation. It is therefore on the "must list" of every physician. It would appear that a revolution in sex customs is taking place and it is our duty to offer knowledge in a manner as "forthright, honest and courageous" as is the character of the young people who are asking for it.

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Vol. 34 OCTOBER, 1938 No. 10

WHAT PART SHALL THE PRACTICING PHYSICIAN TAKE IN THE CAMPAIGN AGAINST SYPHILIS?

By CLYDE L. CUMMER, M.D., CLEVELAND, OHIO

DURING the last two years the control of syphilis has come to the front in the public consciousness as never before. People of all classes have been aroused and inspired with the crusading spirit. Therefore, you are asked today to turn your thoughts to this question: How can the private practicing physician best aid this campaign and stay in the picture? What should he do to prevent the possibility of having the care of this disease shifted entirely to public agencies?

Harsh criticisms have been voiced of the services of the average medical practitioner. Undoubtedly a study conducted by the DuPont Company will be referred to as an example. The medical staff of this company examined 36,794 workers in 51 scattered plants with the Kahn test. When positive results were obtained, adequate checks were made in an independent laboratory, except when there was a definite history. Four per cent of employees gave positive results. These individuals were referred to their own private physicians or, if unable to pay for treatment, to free clinics. What was the experience of the company? Very few prospective patients refused to take treatment. It was claimed that most physicians demanded fees beyond the means of the individuals and out of proportion to their incomes, and that many physicians refused to treat the referred cases, saying that no treatment was indicated. Numerous physicians refused to admit that their patients had syphilis, again in the face of four plus Kahn and Wassermann reactions, denying the validity of the blood tests and stating that they had known them for years and knew that they could not have contracted syphilis without their (the doctors') knowledge (sic!). Many were discharged as having had sufficient treatment after 3 to 10 injections of neoarsphenamine without a heavy metal and some were reported as being well after

The Author

● Dr. Cummer is a graduate of Western Reserve University School of Medicine, 1907; member American Dermatological Association, fellow (director and treasurer) American Academy of Dermatology and Syphilology, charter diplomate, Board of Dermatology and Syphilology, member Council on Scientific Assembly, American Medical Association; former president, and chairman Committee on Education, Ohio State Medical Association; visiting dermatalogist and syphilologist, St. Vincent's Charity Hospital, Cleveland, and Director of Clinic; assistant clinical professor of dermatology and syphilology, Western Reserve University School of Medicine.

Read before the First General Session, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11, and 12, 1938.

a few mercury inunctions or a few intramuscular injections of water-soluble bismuth! Others were treated with pills and nothing else. ([1]) Inasmuch as this was a mass study of almost 37,000 individuals in over 50 communities in different parts of this country, the experience was not regarded an index to medical efficiency in any single locality but rather was interpreted as reflecting to some extent the attitude of many of the doctors in this country. If this attitude does prevail, it will have to be altered so that practicing physicians may retain control of the treatment of this disease, for the same writer goes on to say, "it does seem advisable for the industry to take over the entire management of these patients and thus insure to them continuous and proper treatment."

Surely this is a threat to the private practitioner's control of the treatment of syphilis. We are challenged; of that there can be no question. It seems to me that the answer lies in the following: In the first place, if we as private practicing physicians desire to treat the increasing number of cases certain to be uncovered in coming years, we must be prepared to treat them effectively according to modern standards. Then we must place our services within the financial means of the patient. Also we must assist in the education of the general public as to the necessity for recognizing and treating syphilis and demanding that it be regarded as a public health problem exactly as any other infectious and contagious disease; and finally we must cooperate willingly with health agencies. Along these four lines will my remarks be developed.

THE MEDICAL PROFESSION AS TEACHERS OF THE PUBLIC

Traditionally our ideals have included the protection of the public health, so it behooves us physicians to aid in the education of the public. This we cannot do alone, but fortunately many agencies are waiting for our cooperation. We can help by giving our patients an idea of the modern point of view about this infection, its preventability and curability; by stressing the point that it should not be regarded exclusively as a venereal disease, since many acquire it innocently; by stimulating public meetings at which suitable addresses may be given; by speaking to lay groups when requested; by seeing that the excellent sound film, "For All Our Sakes," put out by the American Social Hygiene Association, is shown as often and to as many groups as possible. Every county medical society should have a committee on Social Hygiene to cooperate with the subcommittee on Public Health Education of the Ohio State Medical Association. Public addresses should be well thought out and especial care should be taken to avoid the repulsive. Excellent outlines for public talks to lay groups are obtainable from the American Social Hygiene Association.

COOPERATION WITH HEALTH DEPARTMENT AND OTHER PUBLIC AGENCIES

We physicians should regard ourselves as agents of the local health department and, on the other hand, the health departments should place every possible assistance at our disposal in the way of laboratory service, and the furnishing of drugs, tracing contacts, etc., and provision for hospital care of certain actively infectious cases. Cases of syphilis should be reported, but personally I think there are weighty arguments against reporting cases by name, and if such a requirement were to be enforced, the campaign against this disease would be set back many years. There would be a lack of confidence on the part of the patient in his physician which would weaken the traditional patient-physician relationship, a relationship which should be fostered if persistence in treatment is desired. If it were known that physicians were reporting routinely all syphilitics by name, the net result would be to drive even more patients to quacks and counter-prescribing druggists. However, it is our duty to aid in the collection of vital statistics so cases should be reported faithfully by initials or code number without any data by which the patient could be identified. If a patient with infectious syphilis becomes delinquent in taking treatment in the infectious stage, or in the stage when relapses are to be expected, then and only then should he be reported by name and address so that he may be traced and brought in for treatment, but I cannot favor reporting cases of non-infectious late or latent syphilis even when delinquent, and to do so would hinder the recognition of many cases, prevent them from seeking treatment, and possibly encourage the use of reporting as a species of blackmail.

Cooperation between private physicians and public health agencies is necessary in the detection of contacts, a most important step in bringing this disease under control. This should be done with the active and willing cooperation of the patient. The importance of this from a public health standpoint cannot be over-estimated. After contacts have been traced, the aid of many agencies including the health department, police department, child welfare workers, etc., may have to be enlisted. But none of this potential energy can be released until the attending physician presses the button.

THE IMPORTANT QUESTION OF FINANCES

Financing treatment over a long period of time will be a major budgetary problem for the majority of patients. A few can pay good fees, to be sure, but to many even a few dollars a week

over a period of two or three years means a tremendous load. When a syphilitic comes to one of us for treatment one of the first steps should be a frank and full discussion of finances, the patient putting his cards on the table and the physician constituting himself a social worker. After careful study the sum which can be paid in cash each week without hardship can be determined. If the doctor can afford to give treatment on such a basis, an understanding can be reached; if not, he should help the patient find a private practitioner who can. To allow a bill to run up to large figures is a double mistake. The physician stands little chance of collecting it; and the patient, knowing he owes a substantial sum, usually discontinues treatment and so runs the risk of incurring subsequent physical disaster. While accepting smaller cash fees may seem to be a sacrifice to the doctor, there are certain compensations. Paraphrasing an old proverb, "A dollar in hand is worth two on the books;" the treatments usually are not as time-consuming as an ordinary office visit with a talkative neurasthenic; the State is now willing to furnish drugs gratis, which is helpful; and the income from a number of syphilitics at reasonable fees will bulk well at the end of the month.

Furthermore, and this is a most important point, it would be very regrettable from the standpoint of a profession which has consistently opposed the socialization of medicine if it were to drive many patients to free and part-pay clinics where they will become habituated to receiving mass care. If we private practitioners wish to hold off the advance of socialized medicine, it is important to keep all possible patients as private patients.

THE CONTINUING EDUCATION OF THE DOCTOR

I have a keen realization of the many demands made upon the time and thought of all active practitioners. Many are the worthy movements which we are all asked to support, including the control of cancer and tuberculosis, the reduction the infant mortality, the lowering of the maternal death rate, the prevention of such infectious diseases as diphtheria and scarlet fever. All are of prime importance and none should be disparaged. To keep abreast of all, to allow time for study and still practice medicine, often seems very difficult. However, because of the fact that syphilis has been dragged into the open by Surgeon General Parran; because the public press at last has been willing to print the word syphilis and discuss the disease plainly; and because the general public will be talking much about it and will expect each and every one of us to inform and lead them, it is vital that we be well abreast of current knowledge. Unfortunately teaching in this subject was not given its proper place in the medical curriculum when many of us were students, and even in this present day it is possible for a medical student to graduate with little systematized knowledge of the practical handling of those infected with syphilis.

PRESENT UNDERGRADUATE TRAINING

After surveying the teaching of venereal disease control in the medical schools of the country O'Leary ([2]) made this statement: "I believe that most of us here present today will agree that only a few medical schools devoted sufficient time to teaching control of the venereal diseases, and in view of the fact that the instruction must be inadequate in the majority of schools because of the small amount of time assigned to the subject, it is apparent that many medical graduates are leaving college grossly lacking in their knowledge of these diseases, not only in the laboratory and clinical phases, but especially in the public health aspects."

In the state of Ohio there are three medical schools all given an A rating by the American Medical Association. In one syphilology is not a required subject although students are offered an optional course in the junior year. Instruction is given to those electing this course in the technic of venipuncture, intravenous technic, and spinal puncture. I am told that a large proportion of each class elect this course, but let me stress this regrettable fact, a student is not obligated to take the course and may receive his degree and eventually pass the State Board without any practical knowledge in this subject.

In the second school, 11 lectures are given in the junior year and 24 hours are allowed for dispensary work in the senior year. Special clinical work, amounting to approximately 60 hours, may be elected in the senior year on the genito-urinary service. Students receive instruction in intravenous technic and spinal puncture and have an opportunity to perform these procedures. In the third school, the instruction offered, partly optional and partly elective, is given in the junior and senior years. The time allotted amounts to about 75 hours, or two and one-half credit hours. Teaching is didactic and clinical. Students receive instruction in intravenous technic, but spinal puncture is taught only to interns.

Now this amount of teaching, which seems utterly insufficient because too much is optional or elective, is given to those who will be graduated in the years 1938 and 1939. What about those who were graduated 10 or 20 years ago? Very few had even this much instruction, and that was according to the knowledge of that day, much of which is now obsolete. While many have kept pace with the advance in knowledge, others have not. This is of vital importance

since grave doubts have been voiced about the sufficiency of man power to carry out treatment if the campaign proves successful in detecting a considerable part of the countless individuals now unrecognized as syphilitic and therefore untreated, and inducing many to seek treatment from regular physicians. We must recognize the fact that the treatment of the great majority will not be carried out by specialists, but will be, and should be, in the hands of the general practitioners.

PRESENT EFFORTS IN POST-GRADUATE EDUCATION

In an attempt to furnish instruction in present-day methods of diagnosis and treatment, the Committee on Education of the Ohio State Medical Association has started Post-Graduate Lecture courses in regional centers through the state, and its plans call for one lecture on syphilis during the each of the first two years of the course. However, lectures are purely didactic; patients are not shown and demonstrations are not given in the technic of diagnosis and treatment. It is extremely unfortuate that the physical arrangements for these meetings make clinical demonstrations almost impossible.

Institutes on Syphilis were held at Cincinnati in May and at Cleveland in October of 1937, to which were invited physicians from the entire respective councilor districts. In each instance the entire day was devoted to demonstration of patients with visible manifestations, to demonstrations of the modern methods of treatment and diagnosis, to practical talks on important phases of the disease, and to lectures reviewing the progress of treatment. At Toledo also a day was devoted to the subject.

DESIRABLE EXTENSION OF ACTIVITIES

It seems to the Committee that this means of presenting the subject should be adopted in each councilor district with the presentation of patients and the demonstration of technic of treatment at some central hospital, emphasis being on the clinical side. However, the Association can do no more than to strongly urge the officers of each councilor district to follow this pattern. Our members certainly are entitled to this sort of review if they desire to avail themselves of it, and we hope they will demand it.

In addition, the three medical schools in the state could make it possible for physicians to come to any one of the schools for instruction and practice in intramuscular and intravenous technic. This is being done now at Lakeside Hospital in Cleveland by Dr. George Binkley under the general direction of Dr. Harold N. Cole, clinical professor of dermatology and syphilology of Western Reserve University School of Medicine. Physicians are permitted to come and spend either a few days or a much longer time. So far a considerable number have availed themselves of this privilege.

IMPRACTICABILITY OF LONG POST-GRADUATE COURSE

While longer post-graduate courses have been projected for health officers and consultants, it will be found that the great majority of practicing physicians will not leave their practices and spend weeks or months at some teaching center. Instruction must be taken to them, and even if it is not prolonged or intensive enough to make expert syphilologists, it will make them better practitioners.

WHAT A COMPREHENSIVE POST-GRADUATE EDUCATIONAL PROGRAM SHOULD COVER

What points should a comprehensive educational campaign include? It is clearly impossible to present a complete review of as large a subject as syphilis. From a practical standpoint it is not necessary to do so. However, emphasis can and should be placed on certain features, which may be summarized as follows:

1. Diagnosis of more cases—
   a. Early contagious case.
   b. Pregnant syphilitic women.
   c. Latent cases.
2. Keen realization of the necessity for treatment, and then
3. Efficient and adequate treatment of the recognized cases.

DETECTION OF INFECTION

If one practices medicine at all, one cannot truthfully say, "I do not see syphilitics". Every one sees them; but there is a difference between seeing and recognizing. Syphilis has no respect for the pigeonholes into which medical practice has been divided. It invades all the little principalities staked out by the specialities.

Neither has syphilis any respect for status in life, occupation, or locality. It exists in the rural as well as the urban districts; some writers feel that it may be almost as prevalent in the rural counties[3]. The well-to-do can be infected as well as the poorer classes. Suspect the clergyman, golf partner, or respectable business man just as much as the indigent, for no class is immune. Constant suspiciousness is necessary for the detection of the many latent cases.

Detection of syphilis requires a wide knowledge of medicine, constant thinking of it as a possibility, and the willingness to look for it always. Its disguises are multiform and its ability to hide-out surpass those of any present-day gangster. However, just as the experienced detective usually knows in a general way the sort of hiding place a given criminal is likely to seek, so the wise physician rightfully looks for syphilis in certain classes of patients or in patients with certain signs and symptoms. Every doctor must

have a high syphilis-suspicion index. He should not dismiss any genital lesion as non-syphilitic until he has adequate proof, either by repeated negative dark-field examinations or repeated negative blood tests. Teaching must enforce the point that there is no "typical primary"; that all the classical features may be absent; that the sore may be soft rather than indurated; multiple rather than single, and still harbor spirochetes.

The great opportunities come with genital lesions. A genital sore should be regarded as syphilitic until proved not to be. Not to burn the sore, not to cauterize it, not to treat it with calomel powder or mercurial preparations until positive that it is not syphilitic, are the teachings which must be put across. Diagnosis cannot be made early without search for spirochetes. If facilities for doing this are lacking, the patient must be referred. The Wassermann reaction cannot be relied upon in diagnosing early genital sores, because a positive Wassermann ordinarily does not appear until the second or third week. The proportion of cures could be raised from 60 to 90 per cent by finding the organisms in the initial sore before the blood test has become positive.

The first cardinal point to be made is, get busy on all genital lesions; make a definite diagnosis by dark-field; if positive, start treatment at once. The future health of the individual and the spread of the disease can be prevented by prompt action.

In what other ways can the physician prove himself alert? He will insist upon as many routine Wassermann reactions as possible, on hospital admissions, or as part of the periodic health examination. He will see that one is done on every pregnant woman, for here is chance to confer a double benefit by treating a prospective mother and preventing her child from being born with syphilis.

In studies in 14 prenatal clinics, 14.8 per cent of negro women and 5.6 per cent of white women were found to be infected, making a general average of 9.9 per cent. When tests were done on 2559 pregnant women as a matter of routine, 4.4 per cent gave positive Wassermann reactions, whereas when the tests were done only when apparently indicated in a group of 19,411 women, only 0.06 per cent were found positive, showing that when routine tests were not employed, 72 out of 73 cases of syphilis in pregnancy were missed.[4]

Furthermore, it has been found that syphilitic mothers, treated during pregnancy, bore 95 per cent of healthy babies apparently free from syphilis.[5] On the other hand, when children were born with syphilis, even when treatment was started, in a group of 125 under one year of age and continued for six months or more, only 72 per cent were serologically cured. A group of 66 in whom treatment was not begun until after the age of one year and continued six months to less than a year, 12 per cent only were serologically cured, although in a similar group of 193 treated more than a year, 44 per cent were serologically cured.[6] Compare these results and think of the saving in life, money and human misery attained by recognition of syphilis in pregnant women and administration of treatment in pregnancy. The physician need not be fearful of giving active treatment during pregnancy, although we were in earlier days, because pregnant women seem to tolerate treatment as well as, or even better than, non-pregnant women.[4] To discover syphilis and give treatment during pregnancy is my second cardinal point.

Now the alert physician will think of syphilis also in chronic skin conditions, especially in those of nodular or ulcero-nodular type, and how often these are missed! Aortic disease will suggest the possibility to him, as will obscure central nervous system manifestations, especially lightning pains, sensory symptoms and difficulties in locomotion. The ophthalmologist has especial opportunities to pick up lurking infections—for the suddenly appearing squint or ptosis, iritis, optic atrophy, or keratitis will arouse him to as prompt action as any emergency. How many cases of syphilitic interstitial keratitis pass for weeks or months as "pink-eye"!

The recognition of syphilis in the latent (symptomless) stage is of especial importance to the affected individuals, for here is the chance to prevent serious damage to important organs and tissues. If treatment is worthwhile in late syphilis with active lesions, it is even more useful in the latent stage before serious tissue damage has taken place.

If we can make only two points, and if practicing physicians could be induced to do only two things, they would be these, for they are absolutely vital from the public health standpoint:

(1) To recognize early syphilis in the pre-Wassermann positive stage.

(2) To detect and treat syphilis in pregnant women.

TO TREAT EFFICIENTLY THE DIAGNOSED CASES OR SEE THAT THEY GET EFFICIENT TREATMENT

Before we discuss this, we must try to answer the question, "What is efficient treatment?" Fortunately the Cooperative Clinical Group has given us the answer as it applies to the cases seen early (in the primary or secondary stage). This statistical and clinical study has set an authoritative standard and has made all haphazard plans seem like blundering guesswork.

We must broadcast the modern conception of treatment for early syphilis. This may be summarized briefly, but quite inadequately, as continuous treatment with intravenous injections of arsenicals and intramuscular injections of heavy

care they become soiled during micturition and defecation. They are constantly bathed in lochia. They become entangled in the vulvar pad. If no pad is used they irritate the skin. They conduct bacteria along their surfaces from the outside into the depth of the wound, favoring infection and sinus formation. The patient will testify that they are uncomfortable. Each visit of the nurse for perineal toilet becames a painful experience. They require removal. Witness the relief of the patient when told there are no sutures to be removed. For these reasons I have many years ago discontinued this type of closure. Although Kretzschmar and Huber[1] state in a study of 2987 episiotomies with excellent results performed at the Chicago Lying-In Hospital, that morbidity and end results depend on factors other than the type of suture material, yet in their series, the infections and end results listed as poor on follow-up are twice as high in the silkworm series as in the catgut series. I am of the opinion that catgut when used alone as interrupted or continuous suture is superior to unabsorbable material.

In 1927 I began the use of a continuous subcuticular catgut closure with chromic catgut No. 2. In general the patient was more comfortable but there were some disruptions and some separations requiring secondary closure, skin clips or healing by granulation. Catgut in heavy sizes has the same difficulties as silkworm in that its tensile strength favors strangulation and in addition acts as a foreign body resisting absorption. This is particularly true when used as interrupted sutures with many buried knots. Catgut knots are often picked out of wounds unabsorbed. Marked improvement followed the use of chromic catgut # 1 but it was only with the use of chromic catgut #0 and #00 that the results were entirely satisfactory. It seemed to me that if I could do away with buried knots and reduce the size of catgut, keep all material beneath the skin the objections would largely be done away with. In practice this has been satisfactory. Sufficient tension to produce strangulation is not practical, with a continuous suture of chromic catgut #0 or #00. The amount of material is miminal. For several years there has been no disruption, no secondary repairs, little swelling or pain and only occasional separation of the skin edges that required no treatment. It is an axiom that the finest catgut that will maintain approximation for the period of healing is followed by optimum results.

Hess[2] imbedded catgut of different kinds and strengths in the perineum postpartum, under different conditions, and removed them at stated intervals. He then tested their tensile strength. He concludes that since the reduction of tensile strength was rapid, chromic catgut #00 retaining a tensile strength of 1.6 pounds at the end of five days, and 1 pound at the end of ten days, that either the tension required to maintain apposition in this region is slight or the wound acquires sufficient cohesive strength at the end of five days so as not to require sutures. As a matter of fact both contentions are true. No structures of great holding power are involved. Hess states that the paravaginal fascia will sustain a pressure of three to four pounds, the transverse perinei considerably less and the levator ani a pull of not greater than four to five pounds. Spivack[3] places the tensile strength of chromic catgut #00 at four pounds and chromic catgut #0 at seven pounds. This principle of no buried knots and a fine continuous suture was emphasized by Royston[4] in summarizing his results with complete laceration of the perineum.

I am not aware of a similar technique having been described, and because of the satisfaction I have derived from it, I have presented it here. A Gelpi retractor or two Allis forceps held by an assistant afford good exposure. The apex of the vaginal wound is sought and a 24 inch strand of chromic catgut #0 is passed through the vaginal mucosa and its underlying fascia, and tied. The vaginal wound is then closed with a continuous suture which is then passed downwards, without tying, into the deeper structures entering on the lateral half. The closure is begun on the same side, at the point of entrance, fixing the suture, so that the vaginal mucosa is not drawn down into the wound. With just enough tension to maintain apposition, the deep structures are approximated in layers, beginning from above downward, and then upwards, repeating this in a continuous stitch until the wound is closed, always ending at the base of the incision where the subcuticular suture is begun. The skin edges are approximately upward almost to the muco-cutaneous junction, where it is passed somewhat as a crown suture, then upward through the mucosa which is closed past the hymenal ring, and the suture tied. There are two knots the first at the apex of the vaginal wound and the second just above the hymen in the vagina. From 12 to 20 inches of catgut are used. If dead space appears the needle is reversed and a bite as a figure of eight is taken.

In 1587 consecutive private cases delivered by me since this technique was used 51 per cent or 800 were subjected to episiotomy, and closed in this fashion with catgut from # 2 chomic to # 00. The results improved as the lighter strengths were put into use. Six hundred and sixty-four cases delivered since January, 1935, were studied as to immediate and late results. Episiotomy was done in 333, 40 per cent of which were median, 40 were closed with chromic catgut #1, 285 with chromic catgut #0, and eight with chromic catgut #00. The immediate results were satisfactory, healing by first intention occurring in all but six cases or 1.8 per cent. Four were separations of the skin edges only that promptly healed. In two

or .6 per cent there was infection and necrosis, healing taking place by granulation. No secondary repairs were necessary. All types of operative deliveries are included. Although in general, healing took place as well in the difficult as the simple cases, it must be noted that the two sloughs occurred in mediolateral episiotomy in obese women closed with chromic catgut #1. One was a breach extraction and the other was a podalic version and extraction, both with forceps on the after-coming head. There was no other morbidity as a result of episiotomy.

Two deaths occurred in this series of 333 episiotomies from unrelated causes. One occurred within 24 hours from acute cardiac dilatation and one from acute parotitis followed by abscess and pulmonary infarction, in which the episiotomy wound healed by first intention.

Two hundred and ninety-three were examined at six weeks postpartum, 240 were primipara, in whom there were eight relaxations of the pelvic floor or 3.3 per cent, 6 cystoceles and two rectoceles. Fifty-three were multipara in whom there were 16 cystoceles and 10 rectoceles, but only two of these cases were previously repaired by this technique. This was not unexpected. Going over the records to tabulate the episiotomies I was struck with the frequency of relaxations in the cases that apparently had suffered no injury in spontaneous delivery without episiotomy.

Galloway[5] called attention to this fact when he reported 500 cases of episiotomy and low forceps with only nine relaxations of the pelvic floor. Mordwinkin[6] showed an incidence of pelvic relaxation of 3.4 per cent after episiotomy as compared with 55.6 per cent after spontaneous laceration.

CONCLUSIONS

1. Episiotomy is a measure of prime importance.
2. A method of closure is presented, utilizing a continuous entirely subcuticular suture of chromic catgut #0.
3. Primary union and good support is the rule.
4. The method is remarkably free from the usual inconveniences, the patient more often than not, being unaware of the incision in her perineum.

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DISCUSSION

Raymond C. King, M.D., Toledo: Episiotomy is the surgical incision of known vulvar structures performed to facilitate delivery and prevent an unknown degree of trauma and stretching to the pelvic floor. Although the operation has been known and used since the early part of the 18th century, it is only within the last 25 years that its use has been generally advocated. De Lee, Pomeroy, Mathieu, Titus and many others have been staunch advocates of the procedure, as well as initiating various valuable modifications of the technique.

The types usually described are the lateral, the median, and the medio-lateral. The first of these, viz., the lateral, is practically discarded at the present time, while the latter two, viz., the medio-lateral and median both have their advocates as well as their advantages and disadvantages. The proper choice depends upon conditions in each individual case.

When only a small space is needed, or when the patient has a sufficiently deep perineum the median type is preferred by many obstetricians. If, as sometimes happens, the opening is then insufficient a resulting tear through the sphincter and into the rectum may embarass the judgment of the obstetrician. To avoid this complication, Mathieu has recommended in cases where there is insufficient room after the usual median episiotomy, that the sphincter be dilated and then incised to prevent a traumatic rupture and tear. Titus, likewise, describes a circular incision which laterally encircles the arms to prevent additional lacerations when the median type of episiotomy gives insufficient room. The median incision is usually smaller and the anatomic structures are more easily and quickly repaired.

The medio-lateral incision gives more room and if properly performed is not complicated by further tearing. As the direction of probable tearing is away from the rectum, the sphincter is not injured and there is less contamination of the field. Although, perhaps, more skill and care are required to properly repair the medio-lateral type of incision its advocates feel, with a little experience, the operator is able to obtain the same favorable results.

The proper time to perform the episiotomy is still the subject of considerable discussion. If we are to admit its purpose is to facilitate delivery and prevent damage to the perineal structures, then it must be done before these tissues are injured. To wait until the vulva blanches or actually begins to tear means that the damage is already done and the operation is then a face saving and not a perineum saving procedure.

Everyone who has had any extensive experience with this operation, simple as it is, knows the embarrassment of having the incision break open some few days after delivery. Usually such disaster is the result of faulty technique, viz, infection, devitalization of tissue by the sutures, or the presence of an excessive amount of foreign material in the incision.

The technique, which Dr. Diethelm has described so well in his paper, has given him excellent results over a prolonged period of time, but others who use a different method, in closing incisions, likewise claim equally good results. Advocates of either the continuous or the interrupted suture have certain factors in common, therefore, it seems to me that the essential factors which have been responsible for such favorable end results are, first, a correct anatomical union of tissues that have not been infected,

traumatized and devitalized; secondly, careful approximation, with control of bleeding and the avoidance of dead space and; thirdly, the minimal amount of well-placed suture material.

In other words, if the perineal tissues have been traumatized by prolonged pressure of the presenting part, or by extensive manipulation in operative delivery, or if the sutures are drawn so tightly as to devitalize the tissues, or if too much catgut or other foreign material is used, then an unfavorable result can be anticipated. While it is true the tissues must be approximated, nevertheless, they must not be devitalized by tying the suture too tightly. The use of 0 and 00 chromic catgut, whether interrupted or continuous, as has been so well described in this paper, in a measure at least prevents undue constriction of tissues and likewise definitely limits the amount of foreign material to be absorbed in the wound. Any suture material is used only to keep the parts in apposition until healing has taken place. When this healing, which takes place rather rapidly, is accomplished there is no further need of the sutures. All suture material acts as a foreign body and produces an inflammatory reaction in the tissues. When the heavier types of catgut are used or where an excessive amount of catgut is embedded in the tissues, healing is not only delayed but at times the incision breaks open.

Hess, of New Haven, has used interrupted 00 chromic catgut for many years and commends its use. De Lee and many others, who have used both continuous and interrupted sutures, emphasize the dangers of placing an excessive amount of catgut in the incision. Therefore, it seems if the episiotomy is performed early and the tissues are neither traumatized nor infected and the incision is carefully closed with a minimal amount of catgut, a happy end result can be obtained from this type of obstetric operation.

Endocrine Factors in Human Sterility

Postconceptional Environmental Factors in Habitual Abortion.—Postconceptional endocrine, nutritional, neurogenic, and toxic disturbances affect the decidua and placenta adversely, resulting in edema, hemorrhage, and obliteration of blood vessels, and finally in fetal death.

An antecedent endocrinopathy usually persists but more often becomes aggravated during pregnancy. Disproportion in the production of estrogen, progestin, and the luteinizing principle is an important factor in the etiology of habitual abortion. An excess of estrogen or a deficiency of progestin evokes undue irritability of the myometrium. The administration of progestin in doses of one rabbit unit every other day during the first half of pregnancy gives excellent results. It allays undue uterine contractions and, in some unknown manner, counteracts the harmful effects of excessive estrogen. The rôle of the luteinizing factor (the pituitary-like placental hormone) in the maintenance of pregnancy is not fully understood. There is, however, a deficiency of this hormone in most instances of habitual abortion.

A deficiency of the iodine-containing hormone, thyroxin, is often the cause of unsuccessful pregnancies. Enlargement of the thyroid during gestation is evidence of an effort to meet the additional demand made upon this organ. It should be met by the alternate administration of iodine and thyroid extracts. A basal metabolism below the average normal for a pregnant woman likewise calls for thyroid therapy.

An unrecognized pancreatic deficiency, as determinated by the presence of a low sugar tolerance, largely contributes to the tendency of abortion. Treatment of this condition is too well known to require elucidation.

The important rôle of a deficient vitamin intake in experimental abortion is well known. Its occurrence in the human being on a balanced diet is still debatable. With the increasing knowledge of detecting vitamin deficiencies clinically, it becomes apparent that even an ordinary diet under certain conditions may be totally inadequate in vitamin supply, either because of a greater demand to meet existing exigencies or lack of utilization of an adequate supply. This assumption is supported by the present knowledge that night blindness may occur as a result of vitamin A deficiency in persons on a diet commonly considered well balanced. The addition of a quart of milk daily to the average diet of the pregnant woman supplies the fat-soluble vitamins and calcium in adequate quantities and in the most assimilable form. There is considerable clinical evidence that the administration of vitamin E is beneficial in the treatment of habitual abortion, insufficient, however, to warrant a definite opinion concerning its usefulness.—Charles Mazer, M.D., Leon Israel, M.D. and Charles W. Charny, M.D., Philadelphia, Pa. Med. Jr., Vol. 41, No. 11, August, 1938.

Cycloplegics, Mydriatics and Miotics

Homatropine-benzedrine cycloplegia has proven itself to be of great pratcical value both from the standpoint of the completeness of the cycloplegia obtained and the greatly shortened recovery period. In very young children and in other selected cases the orthodox atropine or homatropine cycloplegia is probably more effectively employed.

Paredrine and benzedrine ophthalmic solutions have proven very satisfactory as mydriatics because of the wide dilatation of the pupil, the clear cornea and the relatively quick recovery period. Benzedrine when used in combination with homatropine or atropine produces a more widely dilated pupil than does the administration of either atropine or homatropine alone.

Eserine (physostigmin salicylate) 1 per cent ophthalmic solution prepared in a tear isotonic solution as a buffer has proven to be an effective miotic following both cycloplegics and mydriatics. No toxic or inflammatory reactions to this solution have been observed.—Lyle S. Powell, M.D., Lawrence, Kansas. Jr. of the Kansas Med. Soc. Vo. XXXIX, No. 8, August, 1938.

THE USES AND ABUSES OF TRANSFUSION

By WM. DEAN COLLIER, M.D., YOUNGSTOWN, OHIO

SINCE transfusions have now been popular for a quarter of a century, since thousands have been performed and since the experiences have been reported in the medical literature from every country, we should feel that we have passed through the experimental stage of this procedure. The indications, the contraindications and the dangers have been rather clearly defined. We should not feel justified in the use of this procedure unless the reported experiences seem to indicate its usefulness in the particular need that we find for it.

There are only a few fundamentally different uses for blood transfusion. First and foremost of these is the replacement of blood loss either by hemorrhage or by hemolytic disease. If the dose is adequate and prompt, the response to transfusion is most dramatic in both acute traumatic and obstetrical hemorrhage provided that the bleeding point has been controlled. If the bleeding point is uncontrolled, massive transfusion is justified only as a preoperative preparation for surgery intended to control the bleeding point.

The problem of chronic hemorrhage from the internal bleeding ulcer and of the hemorrhagic diatheses is more complicated. A fundamentally different usefulness of transfusion is introduced, namely, the control of hemorrhagic oozing. To accomplish this, transfusion will furnish a supply of clot forming substances which the patient may lack; it will support liver function which is so essential to blood and hemopoetic efficiency; it will directly stimulate endothelial and hemopoetic efficiency; and, it will compensate for blood loss. The hemorrhagic purpuras, both the primary idiopathic and secondary symptomatic, which are associated with thrombocyte, fibrinogen or calcium deficiency will respond to the administration of normal blood. Even hemophilia with its pathologically resistant platelets will be furnished with normally dissociative platelets capable of entering into fibrin formation and good solid clot formation. Likewise, all cases of jaundice will be benefited including the acquired and congenital hemolytic jaundices, the icterus of the newborn, the icterus of hemolytic disease and that of biliary obstruction, provided that the homolytic disease is associated with an alkaline urine and a polyuria rather than anuria. The dosage should be small but often repeated so that a more constant efficiency of clot formation will be established and both endothelial and hemopoetic function will be repeated or constantly stimulated.

A third use is in shock due either to absolute volume deficiency following massive hemorrhage or to relative volume deficiency following splanchnic dilatation and peripheral vascular collapse. Transfusions are infinitely better than saline infusions both to elevate and to sustain blood pressure. Acacia also has been found valuable but has been associated with some unfortunate accidents. The dose of blood must be sufficient to bring the blood pressure to normal and must be administered promptly for the best results. The supplemental administration of electrolites may be necessary to obtain the best therapeutic results in some forms of shock, for instance, salt in heat exhaustion.

A fourth use is to support the patient during the aregenerative phase of any aplastic anemia or agranulocytosis with the combined purpose of tiding the patient over the aregenerative period, and, of stimulating hemopoesis and bringing about a remission of the disease.

We cannot admit that the presence of an infection is an indication for routine transfusion. There should be definite indications for transfusion in infection before a transfusion is given and the dosage and the interval of time between dosages and the qualitative character of the blood should be correlated with the indications for transfusion. The specific indications for transfusion during infections are: the administration of potent antibodies; the dilution of toxic blood; the stimulation of the hemopoetic responses in sluggish infections; and, the replacement of blood loss in a complicating anemia.

If it is our purpose to supply potent antibodies, we must be sure that potent antibodies are present in the blood which we intend to administer. Hence, immunotransfusions of blood

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from donors which have a high titre of antibodies induced by vaccines made from the specific organism as that causing the patient's disease, or, induced by recent recovery of the donor from the identical disease suffered by the patient should be used. We are not convinced of the value of nonspecific immunotransfusion and we feel that the immune value of chance transfusion blood is negligible. If it is our purpose to dilute blood toxins whether they are derived from infection, from heavy metal poisoning, from venom poisoning, from carbon monoxide poisoning or other origin, it may be more efficiently accomplished if preceded by partial exanguination.

If it is our purpose to stimulate response in an infection, there should be evidence of lack of tissue response, namely, a leucopenia or a neutropenia. A common method to accomplish this purpose is the administration of small quantities of blood often repeated but many feel that the most effective method is to employ foreign protein shock by administering a few cubic centimeters of mismatched human blood or heterogeneous dog blood.

Tuberculosis is one chronic indolent infection with a tendency to chronic hemorrhage in which repeated transfusions are contraindicated. The hemoptysis may be controlled and the reaction may be stimulated but too many cases have been activated to an uncontrollable and sometimes fatal progression. Other contraindications to transfusion in grave infections are grave asthenia, myocardial failure or threatening failure and a mechanical difficulty in the pulmonary circulation as in pneumonia. While these are contraindications, the associated indications may make the trial of transfusion a life or death matter. If the indications are so positive, blood may be given most cautiously watching for cardiac failure or pulmonary edema and, provided that the blood is given literally drop by drop.

We are also convinced that routine preoperative transfusion is unjustified although there are some conditions under which preoperative transfusion is indicated. A large transfusion should be elected to precede an operative procedure that will be extensive with great blood loss and possible shock and a small transfusion should precede and should follow surgery on the jaundiced patient in order that liver function may be supported, oxyphoremia improved and vascular oozing minimized.

Finally, transfusion of carefully matched blood is the specific therapy for hemolytic shock consequent to a transfusion by mismatched blood.

Now, turning to the abuses of transfusion, we should keep in mind the general rule that transfusion is contraindicated unless there is a clear indication that it will fulfill some definitely established purpose because it is a procedure in which there are inherent dangers that warn against its needless use.

We find that reactions of greater and lesser severity have been reported to occur in from 10 to 60 per cent of cases with an average about 25 per cent. These figures vary because some are the result of more carefully selected conditions than others and some have been either too critically or less critically reviewed. We must conclude that there are a great number of mild reactions such as chills, slight rise in temperature, feeling of uneasiness and pains in the back and in the extremities; and, some which are alarming and may eventuate in death. These latter show more marked manifestations of those symptoms already mentioned together with dyspnoea, cyanosis, hemoglobinemia, hemoglobinuria, jaundice, hemolytic shock with anuria or acid hemoglobin block of renal tubules with anuria, vomiting, rise in azotemic substances in the blood, coma and death.

We have learned that many reactions can be prevented by chemical cleanliness of the instruments and of the utensils used in the preparation of materials for transfusion and those used in the administration of blood. We must remember that cleanliness is as essential as sterility.

We know that less frequent but more severe reactions have been reported as due to careless matching of blood or the use of relatively impotent typing sera. We should feel that we have done a comparatively safe matching only after typing every donor and recipient with unquestionably potent typing sera and then cross match appropriate types immediately before each transfusion. Cross matching should be repeated before each transfusion regardless of a demonstrated compatability at some previous time since agglutinins and hemolysins may appear at any time. All blood of the AB agglutinogen constitution should be checked for autoagglutinins and, if present, should be rechecked using washed cells. We can best guard against mechanical interference with agglutination by using the hanging drop, the open slide under a bell jar or the test tube method of cross matching.

We are also forced to guard against new technical difficulties and new causes of reaction in this day of the growing popularity of canned blood. With its use has come the danger of using overheated, decomposing, gummy or otherwise physically changed blood. We will find it better for the patient if we err on the side of wastefulness rather than take chances in attempting to be too frugal.

Unfortunately, in spite of our knowledge of these reactions and the partial knowledge of their causation, we find records of reactions, some of them fatal, occurring in spite of the most careful observance of all known rules of the technic of the procedure and the most careful checks of conditionisms after the accident has occurred. We must admit that we are impotent in our attempts to prevent all reactions.

Another danger in transfusion is the possible transfer of disease from the donor to the patient. It should be clearly determined that the donor is free from communicable diseases such as syphilis, malaria, virus, bacterial and allergic diseases. The examination of the donor by some reliable serological test for syphilis is not sufficient caution because the chancre may be present and the blood full of spirochetes although the blood serology is not yet positive. Passive allergy has been transmitted from the donor to the patient and active allergy has been invoked in the patient by substances received in the blood of the donor. The emotionally unstable donor whose veins collapse and give technical difficulties during the taking of the blood and who may develop neurasthenia and constitutional inadequacy following the giving of blood and may rarely suffer a fatal collapse during the procedure presents a definite problem. Then, there are some prospective donors with various forms of blood and marrow improverishment that are unfitted to be donors. All in this group are unsuitable as prospective donors but can only be excluded by a careful medical history, a physical examination and suitable laboratory studies before they are accepted.

A most common cause of reaction has been found to be the administration of blood taken from donors who have taken food only a short time before giving their blood. It has been found that the incidence of reaction was materially cut down if the rule was adopted that donors should abstain from food and alcoholic or other beverage for a period of five hours previous to the taking of blood.

Finally, transfusion must be withheld from those with congestive heart failure, from the asthenic, from the aged and from the patient with an embarassed pulmonary circulation and it must be discontinued at the earliest suggestion of the onset of congestive heart failure or the onset of any of the reactions suggestive of the use of mismatched blood. In the life or death emergency of blood want, the blood may be cautiously given in drop by drop dosage. And, transfusions should be withheld from the patient with the hemolytic disease in which percipitated acid hemoglobin blocks renal tubules and should be prophylactically prepared for transfusion by producing an alkaline urine before transfusion is given. Acid hemoglobin block of renal tubules anuria does not occur with an alkaline urine but a hemolytic shock anuria may occur with either alkaline or acid urine.

Since transfusions are fraught with so many dangers, some of which cannot be guarded against, they must be confined to clearly indicated uses. This therapeutic measure must not be included among the harmless placebos nor included among the last rights to impress the family and friends that everything has been done for the patient. Its use must not only be confined to clearly indicated uses but its dosage, rate of administration, selection as to quality and determination of its repetition must be carefully considered in order to achieve the purpose for which it is given.

DISCUSSION

Francis W. McNamara, M.D., Youngstown, Ohio: This excellent paper of Dr. Collier's on the timely subject of blood transfusion presents many opportunities for discussion and much food for thought.

It is true, as the essayist has stated, that the indications for the use of this invaluable agent and the manner of its administration are fairly well standardized. If there is any experimentation today, it is confined largely to the manner of securing and preserving blood. Preserved blood from blood banks, now available at some of our larger hospital centers, and stored cadaver blood now used quite extensively by the Russians, are innovations which offer advantages from the standpoint of quantity and availability. Considerable attention is now being directed to the preservation and transfusion of placental blood. Stravskaya cites the superior qualities of this medium, with its increased hemoglobin, cellular elements, calcium, bilirubin and alkaline reserve, and substances which promote rapid coagulability. Besides the healthy donor, decompensated cardiac patients and hypertensives are being used as sources of supply. Advocates of preserved blood state that its use results in fewer reactions, and that it has a sharper stimulative effect. Shamov reports 19 per cent reaction in cases of transfusion with cadaver blood, compared to 60 to 70 per cent reaction in 1,000 transfusions of whole, or citrated blood.

The source of supply seems adequate enough, but we believe its selection, collection and preservation, unless done by a highly proficient organization, is potentially more dangerous than the use of a fresh healthy donor. In institutions where the number of transfusions is limited to not more than two or three per day, the blood bank appears to be an unnecessary luxury. It is our belief that the responsibility of supplying donors rests with the hospital not with the patient's relatives or friends. Members of the hospital personnel, whose physical and moral qualifications are known, should be utilized.

In our own experience limited entirely to the use of citrated blood, transfusion has given the most satisfactory results (1st)—In hemorrhage. (2nd)—Shock and peripheral collapse where there has been differential loss of blood plasma. (3rd)—Supportive and stimulative, preoperatively and postoperatively where there is anticipated considerable trauma and blood loss. (4th)—Preoperatively and postoperatively in the presence of jaundice. (5th)—Blood dyscrasias—severe secondary anemia and purpura. (6th)—Infections.

We have seen negligible or bad results—(1st)—In moribund patients other than those suffering from hemorrhage and shock. (2nd)—Large transfusions when there is present, or impending, circulatory embarrassment. (3rd)—Overdosage in infants and the aged. (4th)—In subacute bacterial endocarditis, splenic anemia and agranulocytic angina, unless given very early.

In St. Elizabeth Hospital at Youngstown, during the past five year period there have been 598 transfusions for 460 patients, 84 per cent were surgical. There was some degree of reaction in 131, nearly 20 per cent. The reaction varied from a slight rise of temperature with transitory malaise, to cyanosis, dyspnea, nuasea, chills and fever. Fortunately there has been no hemolytic shock severe enough to be fatal. It is believed that these reactions resulted from faulty technique in securing and administering blood, rather than from error in typing and cross-matching. In 38 per cent of the total, transfusion was of no benefit. We believe that this large number of failures was due to poorly selected cases—critically ill postoperatives with infection, and in the moribund where transfusion is a gesture only.

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A careful check of the literature, since the first described case of agranulocytosis by Schultz in 1922, reveals that the mortality rate, according to that investigator and others, during that period was 100 per cent and that the later refinements in diagnosis and newer methods of treatment have reduced the mortality rate by three fourths. It is hardly logical to assume that no part in this improved prognosis is to be credited to the therapeutic methods. The value of our methods of treatment is further demonstrated when one attempts to follow the pathogenesis of the illness. Eliminating those destructive agents which result in accidental leucopenias, and without stepping too far out on a limb as to the probable etiology of primary diseases of the blood-forming organs, it seems fairly certain that there is a common factor underlying the so-called neutropenias and acute and chronic leucemias, and that the apparent relation lies in the ability of the blast cells to mature into functioning leucocytes. Whereas, in the neutropenias this granulocytic anagenesis is apparently capable of alteration by certain therapeutic agents at least temporarily in the leucemic states the blast cells seem to develop neoplastic qualities in addition to their lack of maturation ability. It is interesting, also, that in the leucemias these neoplastic cells have lost some of their chromosomes (Groat, Isaacs) and it might prove important in the future to establish whether or not the blast cells in agranulocytosis also fall in the haploid category. Whatever the exact nature of these cells, it is obvious that their maturation ability is unstable and that even when restored by certain regenerating stimulants, such as liver or nucleic acid preparations, this ability is again easily lost.

The treatment of neutropenia, therefore, resolves itself into the intensive use of the above stimulating agents, but, since their effect does not become manifest until approximately 120 hours after the institution of treatment, in many cases other supportive measures must be adopted. The greatest mortality occurs during these first five days because with the bacteria fighting forces of the organism depleted the body becomes fair prey to hosts of invading pathogens. It is believed by many that this is the cause of the fulminating angina frequently seen with agranulocytosis. The use of repeated blood transfusions, therefore, is of three fold benefit, as suggested by N. Rosenthal and others, supporting the patient in the presence of a severely debilitating disease, replacing, to some extent, however small, the lacking bacteria-fighting elements and also acting in a measure as a bone marrow stimulant.—Harry Wallerstein, M.D., New York. Med. Record, Vol. 148, No. 4, August, 1938.

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The embryological development of the associated anatomic structures has been studied intelligently, and exhaustively. Why, approximately one out of every twelve hundred babies are born with the component parts of their face and jaws ununited, is a problem that still has to be solved.

That the face and jaws are not the only anatomic parts that participate in this process of non-union has been known for some time. A series of 500 cases reveal about 20 per cent were associated with such congenital defects as hydrocephalus, spina-bifida, club feet, syndactylism, polydactylism, anopthalmus, and others. Sixty per cent of the series possessed enlarged thymus glands, shown roentgenologically. A positive Kahn reaction was found in less than 1 per cent. Interestingly enough, relatively few demonstrated impaired mentality. Not infrequently, babies with this malformation suffer from malnutrition.

For some time it was thought that the anatomic components that fuse to make up the face and jaws were hypoplastic, and that because of this hypoplasia, union failed to take place. We now realize that in most instances, the surgeon is confronted with, not hypoplastic tissues, but ununited, fully developed tissue structure which has sprung from its embryologic pattern. Why nature refuses to unite this tissue pattern is still our problem to solve.

Theories too frequent to mention have been brought forth, only to be discarded in view of more intelligent research.[2] At the present time, stimulating work is being done relative to Vitamin A deficiency in pigs. What this may demonstrate, is being looked forward to with anticipation.

For some years, it has been observed that successive generations of the same family were afflicted by this malformation. Now, we have come to the startling realization that it carries with it strong inherent tendencies. That not only does nature fail to unite facial structures adequately, but she passes on the inherent tendency in the germ plasm, which manifests itself in the progeny to come. Observers at the present time are viewing with greater alarm, the problem of inherent predisposition to cleft lip and palate.

Today, adults suffering from this malformation, who have been untreated, form far less of a majority, than they did, 10 or 20 years ago. Two reasons may be offered as an explanation:

1—Application of more diligent effort on the part of the social worker.

2—A more intelligent understanding, by medical observers, of the surgical principles involved, to obtain the best functional and aesthetic results.

Upon the social worker's shoulders has rested a great responsibility. She has, in most instances, overcome the fears and superstitions of the patient and family alike, which once kept them from medical attention. Some patients have been informed that if operated upon, they will not be able to breathe properly. Others have been told that reconstruction is impossible, and that death is likely to follow. Such information as this has kept many from seeking surgical assistance, until a period in life is reached, when reconstruction is more difficult, and results are less effective.

One cannot help but marvel at the fine balance of proportion with which the anatomic parts of the face and jaws develop. From infancy to adulthood, in normal individuals, this delicate process is maintained. The baby from its first breath, throws physical forces into play, which are most important to development. Laughing, crying, nursing, and many other movements of the jaws and face, all have their part in the process. Upon examining the infant, with cleft lip and palate, we readily see, not the finely balanced mechanism of the normal child, but one which has been thrown out of proportion from lack of proper assembly. Physical forces superimposed upon this disproportionate tissue structure, in many instances aggravates, not remedies it. To reconstruct these tissue parts, when nature has

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failed, is the problem which confronts the surgeon.

He has found through experience, that he must follow rather rigid specifications. Naturally, he supposes that the sooner these parts are put in their proper position, the sooner will the mechanism assume its normal development, and function. In view of this fact, every surgeon doing reconstructive work for cleft lip and palate, is anxious to see these babies as soon after birth as possible. The bony tissue of the upper jaw can be manipulated back into a position which approximates normal, much easier, directly after birth. This is explained by the fact that the processes of ossification have barely begun, and thus future fully developed bone is more readily molded into place. The surgeon, in the early manipulation of these tissues into their normal position, accomplishes five distinct purposes:

1—By helping to straighten the nose, which is flattened out in the bilateral clefts, or deflected to one side in the unilateral clefts.

2—By establishing the alveolar process, so that the teeth may erupt as normally as possible.

3—By closing the anterior portion of the palate, thus relaxing the lip so that it may be more readily reconstructed.

4—By enabling the child to nurse with much less difficulty.

5—By more closely approximating the soft tissues of the hard and soft palate, making future surgery more effective.

When one realizes the delicate tissue mechanism which has to be dealt with at this age, the problems of procedure seem greater than ever. All of us have observed the tissue response after methods in which silver wire, lead plates, and buttons, pins, etc. have been used. By such observations, a great lesson has been taught.

Today, to preserve every bit of the tissue structure which nature has given us, and to handle this structure with as little trauma as possible, has become our goal. Being given the opportunity to carry on this work at an early age, brings this goal a little closer, and means much more to the future of the patients.

Having been able to mold the maxillary arch into position, the surgeon uses the methods which have proved most successful to him to reconstruct the lip. Some men approximate the maxillae and operate the lip at the same time. Others do the two procedures separately. Whatever method is used rests entirely upon the judgement of the surgeon supervising. Experience has shown him the results of his own work. In some parts of the country, men are reconstructing the lip over the maxillary arch, which has not been approximated, with the thought that physical forces produced by the lips, the buccal and facial musculature, tend to finally mold these structures into place.

To know when to operate successfully upon the palate has been a problem for years. Up to the present time, a variety of opinions prevail. Some surgeons attempt to close the hard palate when the approximation of the upper alveolar arch is manipulated into place. A majority of others wait until the texture of the soft tissue of the hard and soft palate lends itself more readily to surgical manipulation. They find that the blood supply of these tissues, which in the case of the hard palate, is mostly dependent upon the posterior palatine artery, is much richer at, or around, the time when the child begins to talk. For these reasons, it would seem justifiable to wait until the approximate age mentioned before the palate is interfered with surgically.

Another factor that plays one of the most important roles in the success or failure of palate surgery, is the manner in which its tissue is handled. Depletion of blood supply, increased tissue tension and edema from trauma, are all dependent upon tissue manipulation and place their mark upon the end results. By being able to reduce the bony tissues of the upper alveolar arch into their most normal position, by waiting until the soft structures of the palate lend themselves most kindly toward surgery, and by the gentle manipulation of those structures which enter into the process of repair, depend success or failure.

A high percentage of operative fatalities in the past is very conclusive proof that individuals suffering from congenital deformities of the face and jaws present problems which demand meticulous pre-operative attention. To accomplish this purpose, the cooperation between the pediatrician and the surgeon is imperative. Beside the usual regime of general physical examination, other important details have to be looked into.

As was previously stated, additional congenital defects are frequently associated with this malformation. If found present, these have to be dealt with until they prove not to be a contraindication. As was also mentioned, many infants with this deformity possess enlarged thymus glands, and in spite of our present knowledge of the lymphatic constitution, measures must be taken to reduce this hyperplasia to within normal limits.

The weight curve of the patient should always have an upward trend. Complete freedom from gastro-intestinal disturbances is important. The usual methods which are used in infant feeding will prove satisfactory in most instances. If, on account of the cleft in the palate and lip, the child cannot nurse satisfactorily, an eye dropper, ear bulb, or specially constructed nipple often proves helpful.

Frequently, the change in environment has a deleterious effect upon babies until they become acclimated to their surroundings. This may be

manifested by loss of weight, diarrhea, and other disturbances. Upper respiratory infections which these infants are so readily predisposed to, contra-indicate operative procedures. Methods of pre-medication, as well as the choice of the anaesthetic vary greatly, and are entirely dependent upon those using them.[3]

In considering help needed by the child born with cleft palate, it is necessary to bear in mind two principles: 1—The physical mechanism which comes with birth, making speech possible. 2—The habit forming processes developed, when learning to speak. Normally they go hand in hand.

The physical mechanism of the cleft palate is far from normal, and, although meticulously reconstructed, can in no way compare with its fellow, who has developed under natural influences. Processes of repair such as scar, poor adaptation of musculature, and forces produced by contraction, all play their part to undermine its efficiency. With such an impaired mechanism, the problem of proper speech realization becomes a difficult one.

We are aware that habit forming processes of speech become active shortly after birth, and that at or around 24 months of age, in most instances, the child begins to talk. We also know that if the palate is not closed before these habit forming processes are developed, the impaired mechanism forces the child to form a speech pattern which is far from correct. It is, therefore, our responsibility to make every possible effort to affect institutionalization and surgical help, at an age when the most beneficial results can be obtained.

Teaching patients with cleft palate to speak as normally as possible should begin soon after the palate is reconstructed. It requires constant effort, on both the part of the teacher and pupil to perfect phonation. After the operation is completed, the movement of the muscles must be trained to act as in the normal mouth. The teacher should have in mind a clear picture of the speech mechanism, which includes the palate, lips, and teeth. The patient should be taught how to place the tongue in the mouth, to produce normal articulate sounds. Constant tutelage should be kept up under direct supervision until patients are adequately prepared to carry on themselves. This proves to be a long, sometimes discouraging process, but the results obtained fully compensate for well-deserved endeavor.

CONCLUSIONS

1. That medicine has yet to find an adequate answer to problems bearing upon the etiology of cleft lip and palate.

2. That this disturbance of development carries with it a strong inherent predisposition.

3. That other congenital deformities are frequently associated with this malformation.

4. That surgical interference instituted as soon after birth as possible, gives far better functional and aesthetic results.

5. That speech corrective measures are equally as important as surgery of the palate itself, and are imperative, if the highest degree of function is to be obtained.

FIDELITY MEDICAL BUILDING.

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DISCUSSION

Myron Metzenbaum, M.D., F.A.C.S., Cleveland: Centering the two plates of the vomer as a foundation for the reconstruction of the cleft palate and hare-lip: The vomer is made up of two ossified embryological plates, which spring forward from their sphenoid attachments, and with the two premaxillary bones they form a groove along the entire nasal floor, into which is lodged the lower borders of the osseous and cartilaginous portions of the septum.

In a single cleft palate, the vomer and the entire nasal septum, including the hard and soft palate, are drawn to one side of the median line or center of the face. If the vomer and the premaxillary bones are reset into the median line, they will carry the entire nasal septum towards the median line. This centers the entire median wall of the face so that all the subsequent reconstruction of the hard and soft palate and uvula, the open maxillary processes, and open upper lip and open nostril, all will tend to be drawn towards and centered in the median line of the face.

To accomplish the placing of the two plates of the vomer into the median line, it may be necessary to infract the vomer anywhere from close to its attachment to the sphenoid posteriorly to where it meets the premaxillary bones anteriorly. When this is accomplished, a wire suture is passed through the pyriform fossa of the open nostril through the hard palate close to the alveolar processes, but never through the alveolar process itself for the wire will always shift or destroy one or more of the tooth buds. The wire is then passed anteriorly through the two plates of the vomer close to the nasal floor and close to the premaxillary bones.

The entire vomer and the nose is now forced as far towards and, if possible, beyond the median line and when the vomer and the septum are in this corrected position, the wires are twisted. This procedure forces the open ends of the aveolar processes in close contact, resulting in a soft tissue fibrous union. If the open ends of the alveolar processes are wired there will result, not a bony union but only a soft tissue fibrous union and the wiring will shift or destroy one or more tooth buds.

After bringing the open alveolar processes in contact, the cleft upper lip is closed. The closed cleft upper lip is a continuous definite force in the approximation of the alveolar cleft, and in retaining the alveolar process the vomer and the septum and the hard palate in the median or center line of the face.

ACUTE POLIOMYELITIS AS SEEN IN A RECENT EPIDEMIC IN TOLEDO, OHIO

By HARRY G. PAMMENT, M.D., Toledo, Ohio

THIS disease is an acute infection characterized anatomically by widespread lesions of the nervous system with special localization in many cases in the anterior horns of the gray matter of the spinal cord.

The cause of this disease is a filtrable virus—what a virus is we are unable to say but one characteristic is that it does not reproduce itself unless it is in contact with its specific protein or tissue. Further, it is considered a fixed virus—i. e. after combination with the motor cell, nothing can dislodge it and disintegration of the nerve cell follows. This is probably the main reason for the ineffectiveness of our treatment.

Epidemics of poliomyelitis occur in the late summer and cease with the onset of cold weather—in this respect resembling hay fever. Likewise the epidemic of acute encephalitis which occurred in Toledo in the late summer of 1935 following the dust storms ceased after the first frost. The Toledo epidemic of poliomyelitis began Aug. 2 and ceased Oct. 30, 1936. Not another case occurred in the city until August 6, 1937.

Is it not possible that this virus is transported on dust and pollen thus infecting those that are susceptible? It seems to me that there can be an allergic basis. Many of us are never allergic to this virus; others lose their sensitiveness early in life; others only partially and others not at all. What is the explanation when a disease in one patient attacks the motor cells of the twelfth cranial nerve; in others the motor cells controlling the arms only and in others those of the legs. Tissue sensitivity of the nerve cells might be the explanation.

There are two accepted theories as to how the virus gains entrance to the human body—one by way of the olfactory nerves and the other by way of the alimentary tract. From what I read both sides have proved their point.

During the 18 years that I was epidemiologist for the city of Toledo we only averaged five sporadic cases per year but in 1936 there occurred 59 cases in a period of three months—many of which presented interesting features that I had never seen before. There were eight deaths—four of which were over the age of sixteen years and four under. Twenty-two children under the age of five years were afflicted and nine cases were above the age of sixteen. One-third of the cases had no residual paralysis. One-third had a moderate amount of paralysis. Of the remainder, eight died and the others were severely paralyzed.

The disease apparently is only mildly contageous. The secretions from the nose and throat of active cases as well as from healthy carriers are undoubtedly infectious yet it is rare to find more than one case in a family. However, in this epidemic there were three children in one family afflicted. On the other hand, the first case reported at the beginning of the epidemic had been at a Y.M.C.A. camp for several days before he became paralyzed. Over 100 boys who were direct contacts were kept under a constant quarantine for 21 days but not a single case developed among these contacts.

The new developments for the prevention of poliomyelitis are the picric acid-alum nasal solution of 1936 and the zinc sulphate of 1937. My first disappointment with the picric acid-alum solution occurred during the epidemic of 1936. The orderly at the Contageous Disease Hospital was quite faithful in using the spray according to my directions but on September 24th, 1936, he developed a definite paralysis of his left leg. Likewise the reports from the Toronto epidemic of 1937 concerning the value of the zinc sulphate spray are equally discouraging.

Active immunization with attenuated virus has been discontinued as being dangerous as well as of doubtful value.

Quarantine of the known case is our other method of prevention but I am doubtful of its value but it does help to allay the fears of the laity.

TREATMENT

Fifteen years or more ago I was much encouraged when Dr. Roseneau announced his serum for the treatment of poliomyelitis. He had used it in an epidemic in one of the western states with good results. He sent me a supply at frequent intervals which was used in the Toledo area with doubtful results. At that time I saw

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Read before the Section on Pediatrics, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

a doctor's nephew with a bilateral flaccid paralysis of the legs. I wanted to use the serum but the doctor refused permission. The child made almost a complete recovery. I see him occasionally and outside of some muscle atrophy he is leading a normal life. If I had used the Roseneau serum it would have received the credit for a good result.

Then came normal adult human blood and convalescent serum. A number of years ago our health commissioner came back from a meeting at Toronto with a very favorable report so I became enthused again but about a year later Parks reported over 400 cases from the New York epidemic in which convalescent serum was used in 200. Those patients that received the serum had more residual paralysis than the controls. Another writer states that it can do harm and advises against its use. Lately favorable results have been reported from the use of massive doses of the serum. Of course you realize how difficult it is to obtain large amounts of convalescent serum and for that reason I liked the use of normal adult blood as you can get any amount very quickly—a 30 cc. syringe full from each parent, and if there is anything to our theory of adult immunity it should contain neutralizing antibodies. I used serum on a few patients in 1936 and on eight patients in 1937 but am not enthused about the results. I have not seen the rapid improvement such as follows the use of scarlet fever antitoxin or scarlet fever convalescent serum in streptococcus infections. A number of the patients in 1937 received sulphanilimide without apparent effect. Just recently Retan reports favorable results from the use of hypotonic salt solution which I will use at the first opportunity as the therapy I have used in the past has been apparently without effect.

CASE REPORTS

Just a few short histories to emphasize interesting features:

Case 1. A boy age 16 years complained of headache and nausea Sept. 29, 1936. Temperature was 99. The parents were worried but nothing definite could be determined after examination. Sept. 30 and Oct. 1, the parents reported that the boy was apparently well. Oct. 3, he had a definite paralysis of the right side of his tongue and soft palate. Recovery occurred without any residual paralysis.

Case 2. L. F., male, age 31 years. Onset Sept. 23, with a desire to drink lots of water and a sluggish feeling but he was not drowsy. Sept. 24, he vomited his breakfast and didn't feel like eating lunch. While walking down town began to have pain in his left knee. This same night he developed a definite paralysis of the left leg. This man had sprayed his nose every other day with the picrid acid-alum solution for one week and then once a week thereafter. I suspected hysteria but after several examinations this was ruled out.

Spinal fluid examination:

Cells	5
Globulin	2 plus
Gold chloride	2221100000
Wasserman	negative

Oct. 29, he was able to walk without crutches but still had some weakness in the leg muscles.

Case 3. H. M. Female, age 23 years. Occupation—nurse. The onset was on Oct. 8, as a rhinitis with temperature of 99½. The next day she had pain in her back, legs and arms. Headache and nausea but did not vomit. Her neck became more stiff so she called her doctor. As there was no improvement she was sent to the hospital Oct. 10. Hysteria was again suspected as there was no definite paralysis but weakness of the arms. However, the spinal fluid examination confirmed the diagnosis of poliomyelitis.

Cells	22
Globulin	2 plus
Gold chloride	2221110000
Wassermann	Negative

She was discharged Oct. 29 with no residual paralysis. I want to call attention to the gold chloride curve which at first was thought in this patient to indicate syphilitic infection.

Case No. 4. C. F., age 8 years. Onset Oct. 6 with headache, backache and vomiting. Temperature 102-4/5. Oct. 7, temperature 102 and the neck was stiff. Oct. 8, temperature 103-3/5 and the neck was so stiff that epidemic meningitis was suspected. The spinal fluid examination:

Cells	400—85% polys and 15% lymphocytes
Globulin	2 plus
Cutures	negative for meningococci

Recovey followed with no residual paralysis.

Case No. 5. L. Y., age 8 years. Onset Oct. 18, with difficulty in swallowing. The doctor was called Oct. 20, who suspected poliomyelitis but because of a recent tonsillectomy sent her into the hospital for diagnosis. On admission her temperature was 101—pulse 140—very restless—staring eyes—stiffness of the neck—difficulty in talking and unable to swallow anything. Spinal fluid examination:

Cells	92—65% lymphocytes and 35% polys.
Globulin	2 plus

She was fed with a nasal catheter until November 15, and discharged Nov. 18, with no apparent residual paralysis. Is it possible that this might be the etiology of esophageal diverticulum in later life?

22 SCHMIDT BLDG.

Anemia and Jaundice in the New-Born

There are other clinical aids which should make the physician suspicious that he is probably dealing with a case of icterus gravis aside from the history he frequently obtains of its familial incidence. A very large placenta, yellowish amniotic fluid, or an infant covered with a golden yellow vernix caseosa should immediately place him on guard. Finding of a golden colored vernix caseosa is exceedingly important.—Walter M. Whitaker, M.D., F.A.A.P., Quincy, Illinois. Ill. Med. Jr., Vol. 74, No. 2, August. 1938.

CLINICAL EXPERIENCES WITH INSULIN THERAPY IN SCHIZOPHRENIA

By ROGER F. SCHERB, M.D., and CHARLES W. STONE, A.M., M.D., CLEVELAND, OHIO

INSULIN hypoglycemic therapy was started at Cleveland City Hospital in January, 1937. Up to the present time 29 cases of schizophrenia have completed therapy. The method employed, the results obtained, and some interesting clinical experiences encountered will be described.

Therapy was begun with a small dose of insulin, fifteen to twenty units, and the dose increased daily by five or ten units until hypoglycemic coma was produced. This initial period during which the dose was being built up and in which the patients did not have severe hypoglycemic reactions, lasted usually about five to ten days. Having attained a shock producing dose, a series of severe hypoglycemic shocks was produced, the patients remaining unconscious two to three hours on an average. When the patient was regarded as sufficiently improved or if further therapy was thought probably to be useless, treatment was discontinued.

Hypoglycemic shock was terminated by administering a 30 per cent aqueous solution of glucose through a nasal tube. The tube was inserted before the patient became unconscious. Occasional nausea and headache occurring after shock was found to be eliminated to a great extent by giving only 60 to 70 grams of glucose regardless of the dose of insulin. A 50 per cent solution of glucose administered intravenously was occasionally used, followed by a glass of orange juice on awakening. The patients always received a full meal after coming out of shock.

Although the entire period of therapy varied greatly in duration, in the majority of cases it lasted from eight to twelve weeks. Treatments were given five days a week, Wednesday and Sunday being rest days. Additional rest days were allowed if thought necessary. The patient was regarded as being in hypoglycemic coma when he could not be aroused by calling to him and shaking him by the arm or shoulder. A positive Babinski sign was almost always present at this time but was sometimes observed during mere somnolence. Absent corneal reflexes were frequently found during coma. The reactions observed during hypoglycemic shock were comparable to those observed by many other workers. It is not the purpose of this paper to enter into an elaborate explanation of the vegetative mechanisms which explain wet and dry shock.

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The case material consists of 29 patients, 28 of whom were diagnosed as schizophrenics. A puerperal psychosis diagnosed as an exhaustion delirium, because a sub-delirious toxic-like confusional syndrome was present, later developed into a typical schizophrenic predominantly of the catatonic type, and is, therefore included with the formally diagnosed schizophrenics. Thus, a total of 29 schizophrenics was treated. Sixteen of them were females and thirteen were males. Their ages ranged from 17 to 49 years, but the majority were in their third decade.

The result of treatment was tabulated in conformity with the tentative directions advocated by Frostig[1] in reporting insulin hypoglycemic shock treatment, and is as follows:

1. Complete recovery (+++)
2. Incomplete recovery (++)
3. Partial recovery (+)
4. No improvement (—)

A patient was said to have made a complete recovery when four requirements were met, namely:

1. Complete disappearance of schizophrenic symptoms.
2. Restoration of adequate emotional response.
3. Critical insight into past illness.
4. Full capacity for return to former work.

If any one of these was absent an incomplete recovery was recorded. The group termed incomplete recoveries was regarded as good social recoveries with capacity for work. Partial recovery was used to designate cases in which certain of the symptoms disappeared and which

showed more social behavior and probable capacity for some sort of non-taxing routine work.

The results are shown in the accompanying table.

Out of a total of 29 cases, seven were classified as having made a complete recovery, eight an incomplete recovery, three a partial recovery and 11 as having made no improvement. In agreement with numerous other reports on insulin therapy, the best results were obtained in cases whose duration was not greater than one and a half years. There was a total of 18 such cases, 13 or 72 per cent of which had complete or incomplete recoveries. In all the cases irrespective of duration, 15 or 52 per cent had complete or incomplete recoveries, three or 10 per cent had partial recoveries and 11 or 38 per cent had no improvement. The complete and incomplete recoveries were regarded as definitely positive results and were all discharged. One of the three cases making a partial recovery was discharged. Thus a total of 16 or 55 per cent of the 29 cases were sufficiently improved to be discharged.

Twelve of the discharged patients are known to be maintaining their improvement. The length of time since discharge in these 12 cases varies from 13 months to two months. Two cases are known to have had relapses. One of these cases was a 19-year-old white woman who had catatonic schizophrenia and received 76 insulin treatments with 56 hypoglycemic comas. She was classified as an incomplete recovery. Since going home, although not overtly psychotic, the patient has remained shy and kept herself aloof from social activities, rarely going out of the house. The other case known to have had a relapse was a 29-year-old woman who had catatonic schizophrenia which ran a remitting course. The patient had a previous admission with a spontaneous remission, but had never adjusted well at home. In her second admission she improved abruptly after but eight insulin treatments without true hypoglycemic comas, and was discharged as an incomplete recovery. The patient had a relapse a few weeks later and was sent to another institution. Perhaps more intensive therapy would have prevented a relapse.

One of the cases which had an incomplete recovery had metrazol therapy consisting of 28 treatments with 26 generalized convulsions immediately preceding insulin therapy. The first few metrazol injections resulted in the disease changing from a catatonic type to a hebephrenic type which showed no improvement on further irritative therapy. Insulin was given and the patient made an incomplete recovery on 39 treatments with 21 hypoglycemic comas.

Of the unimproved cases, one died and two were discontinued as a result of complications occurring during therapy. These will be fully discussed later.

The maximum dose of insulin for any one patient ranged from 35 to 220 units, but the majority of the doses were between 50 and 120 units. In one case, 30 units of protamine zinc insulin were given the night before treatment, making it possible to decrease the dose of unmodified insulin from 220 to 80 units and still produce a hypoglycemic coma.

The number of insulin treatment days and hypoglycemic comas varied considerably. In the 15 cases with complete or incomplete recoveries the number of insulin treatment days varied from eight to 76 and the number of hypoglycemic comas from zero to 57. The majority of these cases had from 30 to 60 treatments and from 20 to 50 hypoglycemic comas. In the partially improved and unimproved groups, excluding the fatality and two cases which were discontinued

RESULTS OF INSULIN THERAPY IN TWENTY-NINE CASES OF SCHIZOPHRENIA SUBDIVIDED ACCORDING TO DURATION OF ILLNESS.

Degree of Improvement	Total No. of Cases		Duration of Illness							
			Up to ½ Yr.		½ to 1 Yr.		1 to 1½ Yrs.		Over 1½ Yrs.	
	No.	%	No.	%	No.	%	No.	%	No.	%
Complete Recovery	7	24	5	42	2	66	0	00	0	00
Incomplete Recovery	8	28	4	34	0	00	2	66	2	18
Partial Recovery	3	10	1	8	0	00	0	00	2	18
No Improvement	11*	38	2	16	1	33	1	33	7	64
Total	29	100	12	100	3	100	3	100	11	100

* One case died; two cases had treatment discontinued.

because of complications, all except two had above 30 hypoglycemic comas.

Convulsions occurred in 16 of the cases. The highest number of convulsions occurring in a single case was seven; usually only one or two were observed during the entire course of therapy. In the past the patient was always taken out of hypoglycemic shock as soon as possible after a convulsion. No ill-effects were noticed after them however, and neither was any relation between a seizure and improvement observed. Frequently patients came out of shock spontaneously immediately after a seizure, but would go back into shock later if no glucose were given. At the present time if a convulsion occurs early in the hypoglycemic shock period and the patient's condition is satisfactory we sometimes allow shock to continue.

In a few cases wherein adequate insulin shock therapy failed to make a favorable impress on the schizophrenic state metrazol therapy was given. Two of the unimproved cases had incomplete recoveries following metrazol therapy. One of these cases was a schizophrenic of the hebephrenic type and had 48 treatments and 38 hypoglycemic comas. Metrazol was given three months after the conclusion of insulin therapy. The other case was a catatonic schizophrenic who had 80 insulin treatments with 55 comas. This case remained in a severe catatonic state until metrazol was given four months after the conclusion of insulin therapy. Another unimproved case, also a catatonic schizophrenic, who had received 61 insulin treatments with 56 comas remained catatonic for five months after insulin therapy was discontinued. Metrazol was given because of the favorable response of other catatonic schizophrenics and the catatonic symptoms dropped out making the patient a much better institutional case. Two other unimproved insulin cases received metrazol therapy subsequently at Cleveland State Hospital, but at the time of this writing were unimproved.

Thus two of our insulin unimproved cases improved sufficiently to be discharged after irritative therapy was administered. Whether they would have improved anyway without preceding insulin treatment is problematical. However, it may be that combined insulin and metrazol therapy may yield better results than either alone in certain cases. Possibly these cases were more suitable for metrazol therapy in the first place; this was at least probably true of the catatonic schizophrenics.

It is worth while mentioning briefly three cases treated with insulin shock which later on, after improvement from insulin therapy developed manic-depressive-like attacks. Two of these cases were diagnosed as catatonic and simple types of schizophrenia. During insulin therapy they both improved, the affective tone which appeared undiscernible, gradually returned and assumed normal proportions. One of the cases quickly developed a manic phase which had already incipiently begun while the last few insulin treatments were being given. The other case was readmitted a few weeks after discharge in a typical hypomania. The third case was a 29-year-old woman with a puerperal psychosis who was abulic, resistive, hallucinated, confused, and seclusive, but showed evidence of a depressed affective reaction in the background for a period of ten weeks before insulin was started. During insulin therapy the dissociation symptoms gradually disappeared leaving a typical depressive type of picture which was not influenced by further insulin treatment. The depression gradually improved several weeks after insulin therapy was discontinued. In the first two cases cited above, it cannot be stated definitely whether insulin therapy hastened the conclusion of a depression and induced a manic phase, or whether this was just the natural course of events. It may be that insulin therapy lessened the dissociation features and left the affective elements to stand out more prominently. This appears to be the case in the puerperal psychosis, but these psychoses frequently run a subdelirious course with mixtures of schizoid and affective elements before they finally make themselves known as out-and-out schizophrenic or affective reactions so that we cannot draw conclusions as to how much insulin therapy contributed to the eventual outcome.

The fatality and two complications remain to be considered. The case which ended fatally was a 20-year-old white woman who was psychotic for six months prior to admission and was diagnosed as having hebephrenic type of schizophrenia. The patient had 17 insulin treatments and 11 hypoglycemic comas with no untoward reactions. She had come out of coma three times spontaneously on a dose of 65 units of insulin. On the eighteenth day of treatment 65 units of insulin were given and the patient became comatose three hours later. After being in coma for one hour, the blood sugar level was 16 mgm. per cent, the pulse 68, and the respirations and blood pressure were normal. Her condition remained satisfactory, the patient being in wet shock. Three hours after the onset of coma the temperature was 37° C; this rise to normal usually occurred before the patient came out of shock spontaneously. Fifteen minutes later 300 cc. of 30 per cent glucose were given by nasal tube. As the patient did not arouse, additional glucose was given 45 minutes after the first administration. However, the patient immediately vomited several times, expelling most of the glucose solution previously given. Glucose was given by vein and repeated in ten minutes with a dose of epinephrine, but patient still remained unconscious. From the

time the vomiting occurred, the patient began to sweat profusely, the respirations became stertorous, and increased in rate to 50 or 60 and the pulse fluctuated between 120 and 160 per minute. There was generalized hypertonicity of the entire body with sporadic twitchings of the extremities. The head and eyes were spastically deviated to the right. At times a spontaneous Babinski sign appeared in the right foot. Every few minutes a rigor would occur. Pressure made on the supraorbital notches only elicited a facial grimace on the right side. The tendon reflexes were normal except for a hyperactive left patellar response. The abdominal reflexes were absent. The plantar reflexes varied from normal to extrapyramidal. The temperature rose steadily reaching 41.5° C. seven hours after the first attempt to terminate shock. Additional administration of glucose and epinephrine failed to modify the patient's condition. Sodium amytal was given intravenously and the muscular twitchings and hypertonicity disappeared. During the next four days unconsciousness, hyperpyrexia, tachycardia, and tachypnea continued. Signs of bronchopneumonia appeared and the patient died on the fourth day following the last insulin treatment. After the accident there was a persistent albuminuria and glycosuria, but only a slight acetonuria on one occasion. Lumbar puncture on the day after the accident revealed clear fluid under 6 mm. Hg. pressure. There were 3 lymphocytes per cubic millimeter and the Pandy was negative. On the second day following the accident, the blood sugar was 160 mgm. per cent and the blood urea nitrogen 24.2 mgm. per cent. Treatment consisted of parenteral administration of normal saline and glucose, oxygen inhalations, and supportative drugs as atropine, digalen, caffeine, and epinephrine.

Necropsy revealed a pressure cone of the cerebellum and the cerebrospinal fluid was under increased tension. The central veins of the brain were hyperemic. Microscopically the frontal lobes showed a slight increase in glial tissue. Special stains did not show any special pathologic lesions. The final anatomic diagnosis was: confluent bronchopneumonia in both lower lobes; bronchiectasis of both lower lobes; pulmonary emphysema; pressure cone of the cerebellum; hyperemia of the brain; chronic rheumatic valvulitis; and mitral stenosis (clinically not important).

Before the patient expired we questioned the relatives as to whether she had ever had any evidence of chorea or encephalitis. It was learned that she had a severe attack of influenza two years previously, during which there was unusual somnolence. Ever since this illness the patient slept a great deal and was difficult to arouse from sleep. In view of this information it was believed that the patient not only died a hypoglycemic death but that she also had a chronic post-influenzal encephalitis. It was therefore doubly surprising that apart from cerebral hyperemia and edema sufficient to cause cone pressure, and slight glial proliferation in the frontal lobes, the brain was remarkably clear of frank pathological changes. Baker and Lufkin[2] in three cases of hypoglycemic death also found no ganglion cell alterations which could not be explained by postmortem changes, although they did find multiple tiny petechial hemorrhages. They confirmed the absence of antemortem changes in the ganglion cells by experimental studies on animals. Thus, as far as the evidence allows, our patient apparently succumbed to cerebral edema and bronchopneumonia.

The second case in which an accident occurred was a 29-year-old woman who had paranoid schizophrenia. She was in her sixth hypoglycemic coma with an insulin dosage of 40 units. Earlier in the coma the respirations and pulse were elevated, but they both later became normal, the patient being in quiet wet shock. After two and a half hours of coma, glucose was given by nasal tube. The patient did not arouse within an hour, so 20 cc. of 50 per cent glucose was given by vein, but unconsciousness continued. The respirations became labored and rapid, 35 to 40 per minute, and the pulse rose to 160. The entire body became hypertonic and slight twitchings of the extremities occurred. Vomiting began but ceased after a gastric lavage. One hour after the intravenous glucose was given the blood sugar level was 186 mgm. per cent and the carbon-dioxide combining power of the blood was 50 volumes per cent. Examination revealed absent abdominal reflexes and bilaterally positive Babinski signs, the tendon reflexes were normal except for the patellar reflexes which were hyperactive but equal. The patient continued in the above described condition, the temperature rising to a peak of 40.4° C. six and a half hours after the first attempt to terminate coma. A subcutaneous infusion of saline and glucose was given. Due to the twitchings sodium amytal was given intramuscularly and they disappeared. The urine contained sugar but no acetone or albumen. The next day the patient remained unconscious, but no hypertonicity or twitchings were observed. The temperature dropped to 38.5° C. and the pulse and respirations became normal. The following day bronchopneumonic signs were found. From the fourth day after the accident on, the patient began to make conscious responses and by one week responded to her name.

She was markedly hyperkinetic during the next two weeks, the movements being violently choreiform. These hyperkinesias subsequently subsided completely. As the patient began to talk more it was evident that there was a severe jargon aphasia. This gradually improved. At the end of six weeks the patient could name common ob-

jects correctly and respond correctly to simple verbal commands. Although she could read print aloud she did not appear to understand what she was reading. The patient presented fumbling, tremor, defective recent memory, disorientation for time and place, and dysphoria. There was no paresis or paralysis, nor minor or major asynergia. The tendon reflexes were intact, the abdominal reflexes present, and the plantar responses normal. An encephalogram revealed nothing abnormal. The patient made no further improvement up to the time she was transferred to another institution, about two months after the last insulin treatment.

This patient evidently suffered a severe encephalopathy as a result of hypoglycemic shock. She quickly recovered control of her temperature centers as evidenced by the drop in temperature the next day after the accident, but higher functions returned very slowly and incompletely.

The third complication during insulin therapy occurred in a 30-year-old white male who had symptoms of paranoid schizophrenia for 15 months. The complication consisted of stupor, accompanied by vomiting and rise of temperature to 38.2°C. after glucose was given to terminate hypoglycemic coma. Further administration of glucose appeared to have no effect on the stupor. The stuporous state lasted about eight hours. On arousing from stupor the patient misidentified people, misnamed objects, and had slurring speech. All these symptoms completely disappeared in a few days. Previous to this episode, the patient had a transient aphasia accompanied by a severe headache, but no stupor, for a few hours after hypoglycemic coma. Since this patient on two occasions showed signs of having sustained transient damage to his central nervous system, therapy was discontinued. The schizophrenic psychosis remained unimproved.

Molony and Honan[3] have reported a very interesting case which remained comatose after repeated administrations of glucose and developed rapid respirations, rapid pulse, vomiting and rise of temperature. They found that the blood sugar was elevated and that the spinal fluid sugar was even higher than the blood sugar. This discrepancy continued for several days despite the fact that the patient received nothing except normal saline. These authors inferred that derangement of the carbohydrate-regulating mechanism had occurred and the patient was in a condition of pseudo-diabetic coma. They treated the case with small doses of insulin and she recovered after several days.

Salm[4] described stuporous conditions accompanied by vomiting and sometimes fever, which continued in spite of administration of large amounts of sugar, developing in schizophrenic patients undergoing insulin therapy. He expressed the opinion that diencephalic lesions resulted from the hypoglycemia which in turn caused disturbances in heat regulation and circulation.

Our cases showed marked vegetative disturbances and it seems plausible to assume that some hypoglycemic shocks resulted in injuring the diencephalic vegetative nuclei. Furthermore, the administration of large amounts of glucose may possibly do further damage by overloading an already deficient carbohydrate-regulating mechanism, as was suggested by Molony and Honan.[3] However, we do not mean to imply that the only damage from hypoglycemia occurs in the vegetative nuclei. The second case clearly showed that general cerebral damage had also occurred. We have noted transient aphasias occurring after shock without signs of vegetative disturbances.

Our results with the insulin hypoglycemic therapy are not as good as those reported from European clinics.[5] However, they are in general similar to those reported by American authors [6, 7, 8, 9, 10] especially the results in the cases having a duration up to one and a half years.

The number of our cases is too small and the length of time we have been using insulin therapy is too short to draw any definite conclusions as to the ultimate value of this form of therapy. However, we believe our results are encouraging and that insulin hypoglycemic therapy deserves further trial.

SUMMARY

Insulin therapy was completed in 29 cases of schizophrenia. Eighteen of the cases did not exceed one and a half years in duration, and 11 cases were over one and a half years in duration. There were seven complete recoveries, eight incomplete recoveries, three partial recoveries, and 11 patients were unimproved. Sixteen or 55 per cent of the cases were considered well enough to be discharged.

Twelve patients are known to have maintained their improvement and two are known to have had relapses.

Three major complications were encountered during the therapy, one of which resulted in death, and another in probable permanent encephalopathy. The third accident was only transitory but in some respects approached the situation in the second case.

We believe our results are encouraging and that this method of therapy deserves further trial.

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DISCUSSION

Richard E. Stout, M.D., Cleveland, Ohio: Dr. Scherb and Dr. Stone have given an excellent analysis of their experiences with hypoglycemic therapy in schizophrenia.

The complete remission of seven patients and almost complete recovery of eight additional persons from a group of 29 thoroughly treated cases adds further evidence of the great value of this therapeutic advance. These results should not be minimized because two patients have shown some degree of relapse. Guidance of the patient and his relatives during the period of rehabilitation and adjustment to a changed environment will prevent many relapses. Unfortunately, this degree of control of the patient and his relatives is not always possible.

Hypoglycemic therapy has been completed on eleven schizophrenic patients at Dellhurst Sanitarium, and of these, nine have shown sufficient improvement to be discharged. Five have fulfilled all of Frostig's criteria for a complete recovery and three have shown an incomplete but highly satisfactory social remission. One patient was discharged as partially improved and she alone has shown a return of some symptoms. Only two patients were not benefited by treatment. One of these died from a complication similar to those reported by Doctors Scherb and Stone. The duration of illness in three cases was six months or less, and in the others varied from three to five and one-half years.

In selecting cases for treatment, we have avoided where possible those patients who are basically feeble minded; those whose pre-psychotic personality was so extremely abnormal that if improvement should be secured, it would be very difficult to maintain them in a state of remission; and those who had suffered profound mental deterioration. We did not regard those patients whose illness was of long duration poor candidates for treatment, if these contraindications were not present. We found that we could secure good results in old cases, but because distorted habits of thinking and acting were more firmly established, improvement was seen much later in the course of treatment and the duration of treatment was much longer. Four cases required 65 to 80 comas for satisfactory recovery, and we should have failed in our treatment of all of these cases if we had stopped after fifty comas.

The observations of Drs. Scherb and Stone on those patients who received both insulin and metrazol are very interesting. Their most important contribution for those administering this treatment deals with the serious accidents which occasionally occur. Delayed awakening from insulin shock is always a serious complication and if coma persists after the blood sugar is restored to normal, there is no effective method of treatment. Some of these persons will return to full consciousness after a few hours, or even after a few days, but in others, death or permanent cerebral damage occurs. Almost every observer of these catastrophes has recorded that the dose of insulin and the duration of coma before the administration of carbohydrate on the day of the accident, was less than the patient had previously been subjected to. This perhaps implies that these patients had shown unfavorable symptoms in previous treatments which led to a reduction in dosage. We now believe that headache and dizziness or nausea and vomiting after patients have emerged from coma are warning signals which indicate the need for additional rest days as well as reduction of dosage. Transitory aphasia following hypoglycemia is an even more serious premonitory symptom. We believe that these symptoms are due to the incomplete recovery of the nerve cells from the metabolic disturbances associated with hypoglycemia, and if treatment is resumed before this recovery is complete, serious results may follow the administration of smaller doses of insulin. This may also explain why the coma producing dose frequently becomes smaller as treatment progresses.

The fatality in our series occurred in a patient in whom 120 units of insulin were necessary to produce the first coma, and who for a time required 135 units. During his first 27 treatments, he had occasionally complained of headache and a giddy feeling, and on two occasions nausea and vomiting had occurred during the afternoon of treatment days, but in general his course had been uneventful. The 28th coma was produced with one hundred units, which was the smallest dose he had received during the second stage of his treatment. His blood sugar level had varied from 16 to 26 mgms., per hundred cc., which was not unusual in our series. He did not awake following the administration of glucose by nasal tube and his temperature rose rapidly from 95 to 105-4/10 degrees F., and he had five severe generalized convulsions during the afternoon. His blood sugar was increased to 408 mgm., by intravenous glucose without effect on the coma. Spinal fluid findings were normal. He remained aphasic, had a fluctuating temperature, and was extremely hyperkinetic with crude gross incoordinated movements, had inconstant Babinski reactions and died 18 days later. The gross autopsy findings were limited to edema of the lung and edema and congestion of the brain. The microscopic findings will be reported later, but consisted of severe acute ganglion cell changes throughout the entire brain, sparing only the motor nuclei of the brain stem. There was an intense reactive glial proliferation.

Dr. Scherb and Dr. Stone are to be congratulated for publishing their accidents along with their good results.

Nicholas Michael, M.D., Columbus, Ohio: Insulin shock treatment does seem to be of benefit in the majority of cases. There is no question in my mind that so far it has proven to be a valuable addition to the treatment of schizophrenia. Insulin remissions are better than spontaneous remissions. Patients have better insight and appear more stable. So far relapses have been less frequent. Insulin reduces the hospitalization period to a few months or even less. It makes patients more responsive to psychotherapy which I believe is a necessary part of the treatment. I have treated cases without psychotherapy and the results were not as good. If insulin does not bring about an improvement, metrazol should be tried. Metrazol has been given after insulin in a few cases with remarkable results.

Most of the cases treated at the Columbus State Hospital (76 in number), have been ill longer than a year. I would not advise treatment in those cases who have been ill more than two or three years. More than 50 per cent of our treated cases have improved sufficiently to be at home on trial visit.

NUTRITIONAL PROBLEMS OF THE PRE-SCHOOL CHILD

By ROBERT A. LYON, M.D., CINCINNATI, OHIO

THE pre-school child, two to six years of age, often presents problems of nutrition which differ considerably from those of earlier or later years. During the first year of life the baby's diet and growth are a great concern to most parents so that medical care is usually sought with relative frequency. The school-aged child comes under the surveillance of the school physician, nurse and teachers who detect faulty development and nutrition. The child between the ages of one and six years often escapes the attention of both the parent and the physician except in case of specific illness, and yet the nutritional disturbances which develop at this age may create permanent damage to future development and adjustment.

Standards and criteria for judgment of adequate nutrition are not well established. Tables which list the height and weight standards for specific ages have been compiled from the measurements of many children and allow for individual variations of 7 to 10 per cent from the quoted figures. Because of its simplicity, this method of judging nutrition has had widespread use, but it fails to take into consideration the variations of body build often influenced by racial or family traits. Other anthropometric determinations which have been advocated, take into account the skeletal and soft tissue development. Measurements of arm girth, the depth of the chest and width of the hips, the so-called ACH standards[1] have been employed in certain age groups, and the sitting height, tissue thickness and other measurements have been used by other clinicians with some degree of success. Possibly more valuable than any single group of determinations is the observation of the rate of growth and maturity of the child over a period of months or years.

In studies of nutrition, importance has been attached to the examination of the blood, first in regard to the number, size and hemoglobin content of red cells and secondly, in respect to the amount of certain minerals present, such as iron, calicum, phosphorus, and the organic nitrogenous, fat and carbohydrate compounds. Within the past few years, the development of quantitative tests for several of the vitamins has suggested that these methods be employed as measurements of nutrition. It may be that the discovery of a deficiency of any one vitamin is an indication of an inadequate diet or of some chronic metabolic disorder, but we still lack adequate knowledge of the optimum vitamin requirements of an individual and of the rôle played by minor deficiencies of these substances.

Physiological tests of metabolism, cardiac and vascular function have been employed in certain localities, and recently more detailed study of the effects of muscular activity and fatigue have been instituted.

The types of nutritional tests which have been mentioned are listed in the following table (Table I) and more detailed descriptions of them may be found in a recent review of the subject by Bigwood[2].

TABLE I.

METHOD OF DETECTION OF MALNUTRITION

1. Height and weight measurements.
2. Anthropometric determinations.
3. Growth and maturity rates.
4. Blood examination.
   a. Red cell numbers, size and hemoglobin content.
   b. Chemical tests of minerals, carbohydrates, fats, and nitrogenous compounds.
5. Vitamin levels in the body.
6. Physiological tests.
   a. Metabolism.
   b. Cardiac and vascular function.
   c. Effects of muscular exercise.
7. The physician's estimate from the physical examination of the patient.

Of extreme importance and possibly the most valuable method of determination of nutritional status at the present time is the opinion of the qualified physician who carefully examines the child. He is able to take into consideration such factors as posture, tissue turgor, color of the skin and mucous membranes, body build, muscular development, alertness, the frequency of infections, physical defects and developmental progress. The physician may be able to determine just how far the child has varied from its own optimum nutritional state. However, the standards of such judgment on the part of the doctor

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are far from being well established, and little is known of the importance or significance of such factors as tissue turgor and muscular development. Furthermore, such estimations do not lend themselves readily to analysis or comparison with the observations of others.

The *incidence* of malnutrition of children of preschool age has been hard to determine because of the lack of adequate standards of measurement and also the difficulty of obtaining representative samples of the different strata of society. In the Cincinnati Children's Hospital, marked degrees of malnutrition diagnosed primarily by physicians' estimates, occurred in 619 children or 5 per cent of the total number of medical admissions over a period of 11 years. About 10 per cent of this number were children two to five years of age (Table II).

TABLE II

INCIDENCE OF MARKED DEGREES OF MALNUTRITION
(Cincinnati Children's Hospital)

Total Number Medical Admissions 1927-1937, inclusive—12,262.

Total Number of Patients Admitted—with the diagnosis of malnutrition—619 (5%).

Number of patients 2 years of age	19
3 years	9
4 years	18
5 years	20
Total	66

In a group of infant welfare clinics, marked degrees of malnutrition, diagnosed in the same manner, occurred in 1.6 to 2.5 per cent of a series of 12,668 infants and children, the majority of whom were less than six years of age (Table III).

TABLE III

(Babies' Milk Fund Clinics—94 per cent of patients under six years of age).

INCIDENCE OF MARKED DEGREES OF MALNUTRITION

Year	Number of Patients	Number of Visits	Total number of Diagnoses Recorded	Number of Diagnoses of malnutrition
1936	6,080	25,715	19,550	483 (2.5%)
	(Of this group 2,613 were children two to six years of age who made 9,358 visits to the clinics.)			
1937	6,588	25,249	17,849	286 (1.6%)

(Of this group 2,650 were children two to six years of age who made 9,011 visits to the clinic).

Severe nutritional disturbances seem to be distributed evenly throughout the first six years of life, as the analysis of a group of 1018 infants and children seen this year would indicate. (Table IV).

TABLE IV

INCIDENCE OF MARKED DEGREES OF MALNUTRITION
(Shoemaker Center. January-March, 1938).

Total Number of Children	Marked Malnutrition	Number Patients (2-5 yrs. of age)	Marked Malnutrition
1,018	18 (1.7%)	348	6 (1.7%)

The above figures indicate a rather low incidence of malnutrition, but it must be emphasized that these are highly selected patients with only the most marked degrees of nutritional disturbances. Many more children would fall into the underweight-overweight classification if milder variations from average were considered, or if height and weight figures alone were employed in making the diagnosis. In a series of 100 children of preschool age who were attending a nursery school, every effort was made from the physical examination and the comparison of their weights and heights with standard figures to detect the slightest variations of each child from what was considered his own possible optimum nutrition. Although the parents of these children were of the higher economic levels, 19 (19 per cent) of the patients were slightly below average nutrition, five (5 per cent) were definitely undernourished and one (1 per cent) was overweight. The incidence of malnutrition for all age groups has been reported as high as 23 to 36.5 per cent by Jacobs,[3] while Watkins,[4] in the examination of 486 children, three to five years of age, found 428 (88 per cent) in good physical condition, 56 (11.5 per cent) with fair nutrition, and two (0.5 per cent) with poor nutritional status.

CAUSES

Without doubt the causes of malnutrition of children of preschool ages are manifold and it is always difficult to attribute to any one etiologic factor a pre-eminent rôle. The most commonly accepted causes have been listed in Table V, in the order in which one might eliminate such possibilities in the examination of a child.

TABLE V

CAUSES OF MALNUTRITION

1. Acute or chronic infections.
2. Congenital defects.
3. Hereditary factors.
4. Endocrine disturbances.
5. Vitamin deficiencies.
6. Improper diet.
7. Poor habits of eating or sleeping.
8. Unfavorable social-economic conditions.
9. Psychological disturbances.

In many cases the above factors exist in various combinations to act as predisposing causes of malnutrition. Of the group of 66 malnourished patients observed in the Children's Hospital, only

six of the group had no other discernible defect, while the others had been admitted primarily for some other complaint than malnutrition. The extent to which these other diseases contributed to the nutritional disturbance is questionable but

TABLE VI

DISEASES ASSOCIATED WITH MALNUTRITION

No disease		6
Acute Infections		37
Upper respiratory	15	
Bronchitis	1	
Cervical Adenitis	3	
Gastro-enteritis, typhoid or dysentery	5	
Stomatitis	2	
Otitis media—mastoiditis	2	
Rheumatic fever	2	
Pyelitis	1	
Post Pertussis	1	
Post Measles	1	
Chronic Infections		5
Tuberculosis (pulmonary)	2	
Osteomyelitis	2	
Asthma	1	
Congenital Defects		10
Deformity skeleton	1	
Cleft Palate	1	
Hydrocephalus	2	
Mental Retardation	5	
Oesophageal Stricture	1	
Endocrine Disturbances		6
Undescended testicles	3	
Diabetes	2	
Addison's disease	1	
Anemia (secondary)		12
Vitamin Deficiencies		6

the distribution listed in Table VI will serve to illustrate the possible factors producing malnutrition.

Without doubt, **infections** play an important part in the growth and development of the child of pre-school age. Diseases of the respiratory and intestinal tracts were the most frequent of the acute infections in the malnourished group under our observation. Even colds and minor ailments seem to check temporarily the growth process. The accompanying height and weight charts of two children who attended a nursery school for a period of 10 months illustrates the short interruptions of weight which followed mild infections. (Charts 1 and 2). It seems probable that the exposure of a child to disease accounts for the frequency of illnesses but whether or not a malnourished patient is especially susceptible to the more severe forms of illness has not been proved. In a review of this subject, Clausen[5] stated that deficiencies in vitamins A, B and C may predispose a patient to infection, but that low caloric diets seemed to have no influence on the incidence of disease.

In the review of factors influencing nutrition made by Watkins[4], endogenous factors such as "illness and the inability to assimilate food due to physical disorders" seemed to be more important than exogenous factors of underfeeding, incorrect feeding and unsuitable environment, although unsatisfactory economic conditions apparently influenced the environment sufficiently to promote ill health.

Congenital defects occurred in only a small number of our patients and most of these dis-

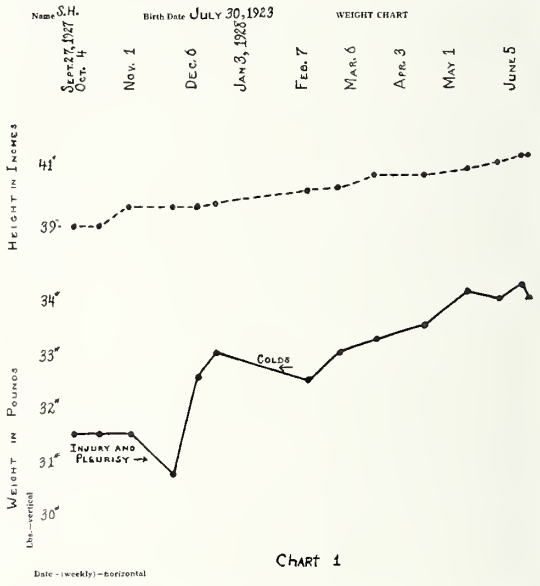


CHART 1

eases were quite apparent as causes of the malnutrition. Minor degrees of congenital defects may be overlooked until the children enter school where comparisons of the patient's physical and

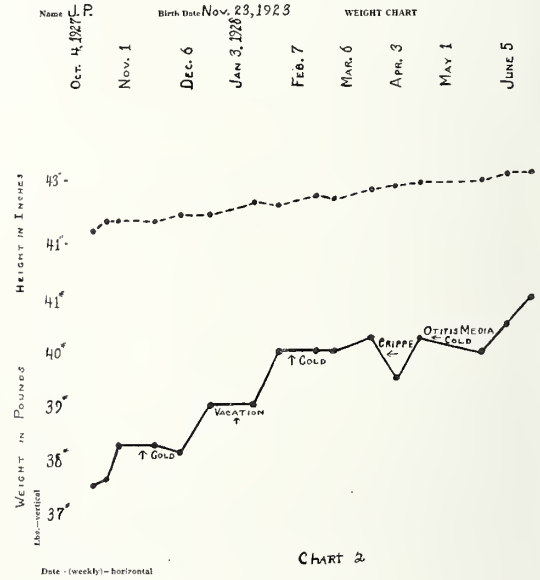


CHART 2

mental development with that of other children is first made.

Heredity is a factor which may influence the size and growth rate of a child but it is always difficult to evaluate the part it plays. Its effects may be confused with those of environment and

the family habits of diet and hygiene may influence the development of the child as it has that of the parents. If one assumes that such a child has had all of the advantages of proper care, and the child has reached his own optimum nutritional status, it might be improper to consider him malnourished merely because he deviates from the general average measurements of children of his own age. Without doubt, heredity influences body build and may account for minor variations in weight and height. In cases of severe nutritional disturbance it should be customary to consider hereditary influences only after other possible etiologic factors have been eliminated.

Endocrine disturbances could be detected in only a small group of our series of patients, although such abnormalities are frequently suspected in cases of prolonged malnutrition which do not respond to treatment. Diseases of the endocrine system are more difficult to detect in younger children because the symptoms frequently do not become prominent until the time of puberty. In a series of 100 endocrine cases attending a special clinic supervised by Dr. Warkany at the Children's Hospital during the past few years, only about 20 per cent have been in children under six years of age. The lesions in this age group have consisted chiefly of deficiencies of thyroid secretion producing symptoms of underdevelopment. There have been a few cases of obesity, apparently resulting from pituitary disease, a few instances of cryptorchism and single cases of diabetes insipidus, adrenal insufficiency and diabetes mellitus.

Vitamin deficiencies of marked degree occur most frequently in the first two years of life. Deformities of the bones resulting from rickets are often seen in children of pre-school years and an occasionaal case of scurvy may develop at the same age period. With the recent improvements of technique for the detection of the body content of the various vitamins, minor deprivations of these substances have been found to be more widespread than previously believed. The influence of the minor vitamin deficiencies on nutrition, growth and resistance to disease is being studied extensively at the present time and it is too early to draw any conclusions.

The influence of diet on nutrition has been investigated thoroughly during the past two decades and a great deal has been learned of the food elements such as amino acids, fats, carbohydrates, minerals, vitamins, and water, which are essential for growth and development. In early infancy, certain minerals and vitamins must be added to otherwise normal diets but, except for rare cases, these necessary food materials will occur in the average distribution of foods recommended for the child of pre-school age. Attempts have been made to add to the weight of children by increasing the proportion of fat, carbohydrate or protein intake or by the concentration of their diets to augment the caloric intake. Many excellent results have been reported from the use of such measures but no one method has seemed to produce consistent improvement of undernutritional states in all children. Other questions of disease and metabolic disturbances must always be taken into consideration in judging the effects of diet alone. Without doubt the diet of the pre-school child should be made up of adequate amounts of milk, eggs, meat, vegetables, fruits and cereals. The educational program and commercial advertising have informed the parents of the dietary needs of children and the wide distribution of foods throughout all seasons of the year has made such diets possible for the great majority of families. Some danger has arisen from the over-emphasis of certain foods which the mother has been made to believe are so valuable for her child that she urges large quantities of them upon the child to the neglect of other types of foods.

Very important factors contributing to good nutritional states in children of pre-school age are **adequate rest** and **regular habits of eating and sleeping.** When the infant begins to walk, he widens his field of interest and soon becomes excited and tired. Unless frequent rest periods are provided for the child, fatigue and poor appetite will check the growth process. At the Children's Convalescent Home in Cincinnati are children who are recovering from illness, who have chronic infections or who are underweight as the result of many possible factors. With the institution of regular rest periods in the morning and afternoon, regular hours of retiring at night, and regular hours of eating, Dr. Nelson, the medical director, informs us that practically all of the children gain in weight, at or above expected rates for their age. The meals are well balanced but no attempt is made to concentrate them or to emphasize any food element. The children with mild forms of rheumatic heart disease who attended our special cardiac clinics are above the average in weight and height, probably because the seriousness of the disease has emphasized the necessity for adequate rest. The recent developments in the field of child psychology have led to a better understanding of beravior of preschool children and popular instruction of this type to parents has taught the proper methods of instituting good habits of eating, sleeping and hygiene.

DISCUSSION

Since the standards of judging nutrition are inadequately established and the predisposing factors of disturbed nutritional states may be numerous and complex, malnourished children must be regarded as diagnostic problems requiring exhaustive study and continued observation.

In order to determine the degree of malnutrition, the average physician will have to depend largely upon height and weight standards and his own estimation of the status of his patient compared with that of other children he has seen and examined. Consideration must be given to the optimum nutritional state possible for the individual child of his body type.

The diagnostic routine followed in our clinics has begun with the careful history of the duration of the malnutrition, the illnesses encountered, the family diseases, the social and economic background, and the habits of the child in regard to eating, sleeping, and playing. A careful physical examination is made to judge the nutritional status, to detect foci of infection and chronic disease. Simple laboratory tests such as urinalysis, tuberculin tests, and the enumeration of red and white blood cells and the hemoglobin content, are done routinely. Not relying upon our ability to detect pulmonary tuberculosis from the physical examination of the chest, we resort to roentgenograms of the lungs of patients who have positive tuberculin tests or of those who have a definite history of exposure to this disease. Congenital syphilis should have been eliminated as a possibility by the serological test of the mother before the child was born, but in the absence of this procedure, this test may be performed on the child's blood. We can state that about 50 per cent of the patients with congenital syphilis in our clinics have been detected by means of the routine serological test of the child's blood rather than by any acute symptoms which he has manifested.

A few children will require more careful study with more elaborate tests to detect minor degrees of vitamin deficiency, endocrine imbalance or other chronic disease. It seems safe, however, to begin the treatment of malnutrition when the ordinary careful physical examination and simple laboratory tests prove to be negative.

The **treatment of undernutrition** must be extended over a considerable period of time before any results can be observed. Once the possibility of any underlying disease has been eliminated, the diet must be checked to make sure that it is adequately balanced. Parents may be told to ignore the amount that the child eats. Placed before him at regular intervals without disturbing his choice of types or quantity, the food consumed over a period of a week or more will usually be adequate in content and many of the eating difficulties will vanish. The appetite of a child of pre-school age normally varies from day to day and in the different seasons of the year. No food should be allowed between meals unless these meals are so far apart that a small, planned lunch of milk or fruit may be necessary in the middle of the morning or afternoon. The constant munching of crackers, cakes, bread and butter, usually causes a poor appetite at mealtime and increases carbohydrate intake to the detriment of the other essential food elements.

The second important phase of treatment is the provision for adequate rest, with at least 11 to 12 hours at night and a nap or period of relaxation in the afternoon. A short rest of half and hour before the noon and evening meals is often very efficacious in making the child quieter and more hungry at meal-time.

The "tonics" so often demanded by parents are usually unnecessary unless the condition of the child should indicate the need for the vitamin concentrates and iron medication. Some physicians have advocated these preparations throughout the entire period of growth and development but our knowledge of their optimum requirements is quite inadequate.

After such a regime has been established for an undernourished patient, it is necessary to observe him at intervals of two or three months to determine his response in weight, height and general appearance. Very important is the trend of the weight curve, any gain being a matter of encouragement, and any loss, a matter of deep concern which requires further examination for specific disease. Once the parent understands the situation and cooperates with the physician, satisfactory results will usually be forthcoming.

SUMMARY

1. Marked degrees of malnutrition occurred in 5 per cent of the 12,262 children of all ages admitted to the Cincinnati Children's Hospital over a period of 11 years.

2. In clinics, the incidence of marked malnutrition in 12,668 children, 94 per cent of whom were under six years of age, varied from 1.6 per cent to 2.5 per cent.

3. Minor degrees of under-nutrition occurred in 19 per cent of a selected nursery-school group.

4. Important predisposing factors of marked degrees of malnutrition in children of pre-school age are acute or chronic infections, congenital defects, and endocrine disturbances.

5. Minor degrees of under-nutrition often have as their basis, poor habits of eating and inadequate amounts of rest.

6. The practical methods of detection of malnutrition are limited to the employment of height and weight tables and the estimate of a trained physician who has carefully examined the patient. Anthropometric determinations, observation of growth and maturity, and certain chemical and physiologic tests may prove to be valuable adjuncts in the more accurate detection of malnutrition.

7. Treatment of malnutrition includes the elimination of organic disease, the planning of an adequate diet, and the institution of regular habits of eating and sleeping.

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MANAGEMENT OF OBESITY

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OBESITY is a sign of overnutrition. In addition to fat deposition a factor in weight gain may be abnormal retention of water. Although clinical facts suggest the possibility, obesity never has been shown to be due to a disorder of fat metabolism.

The best method of diagnosis is inspection of the nude patient. Tables of weight are not of much value because sufficient consideration is not given to body habitus. The method of Willoughby[1] is more accurate in this respect, and the Baldwin-Wood tables[2] are useful in children.

PATHOGENESIS

The maintenance of weight within a narrow margin is due to an accurately balanced mechanism. The following are some of the factors of importance:

In the normal individual, active exercise stimulates the appetite. Food raises the metabolic rate from 3 to 45 per cent of its caloric value (specific dynamic action). The nutrition being good, physical activity is encouraged and food is oxidized rapidly.

Where the appetite is small and nutrition poor, there is less rise of metabolism due to specific dynamic action, poor endurance discourages physical activity, and oxidation is retarded. As nutrition becomes poorer, the metabolic rate falls further.

Various factors may cause an abnormal stimulation of the appetite. Hypoglycemia may be induced by adenomata of the islet cells or by too high carbohydrate intake with consequent stimulation of hunger. Nervous or psychic influences, visceral reflexes, gastric hyperacidity, and certain hypothalamic and adrenal cortical lesions may also be contributing causes. Alcohol increases the appetite and may lead to obesity. Alcohol itself yields 7 calories per gram although the question remains unsettled as to whether it is utilized as food.

The importance of specific dynamic action as a causative factor in the average case of obesity, is extremely difficult to estimate accurately. It is possible that even a small shift may be of some importance, however. For example, if an individual's normal specific dynamic action were reduced by 3 per cent with a daily caloric requirement of 2,000, he would gain 6.5 pounds in a year, or 65 pounds in 10 years.

Grafe's[3] theory of "Luxus Konsumption" is at present largely disregarded. It is recognized that an undernourished individual with a low basal metabolic rate may have a rise in metabolism accompanied by increase of weight to normal. On further hyperalimentation, however, the metabolic rate does not continue to rise but the excess of food is stored.

The greatest single factor in increasing the metabolic rate is muscular work. Average moderate activity increases the basal caloric requirement by 30 to 50 per cent while extreme exertion may raise the metabolism 350 per cent above the basal level[4].

Indirect evidence of retention of water is readily obtained by observing rapid shifts in weight which are unexplainable on a basis of possible rate of fat oxidation. In this connection it is useful to remember that the average diet supplies 250 to 300 cc. of water from oxidation of the dry food plus 1200 to 1400 cc. of water combined with the food taken.

CLINICAL MANIFESTATIONS

Symptoms—A high degree of mental and physical activity is consistent with marked obesity in some cases but diminished energy and endurance are the rule, so that laziness induced by obesity may in itself become an added cause. Somnolence is common and sometimes extreme. Dyspnea frequently occurs. The heart may be embarrassed for several reasons. It is encroached upon by fat either about the heart, between the muscle fibers, or in the cells themselves. The extent of the field of circulation may be greatly enlarged by increase in body bulk. Because of the added weight, exercise is associated with a great increase in actual work done by the peripheral muscles and therefore in turn by the heart. Arterial hypertension is common.

It has been adequately shown that, in the majority of cases of obesity, the basal metabolic rate is normal in relation to surface areas. Only the fatty tissues have increased materially in bulk in such cases, but these have low metabolic rates while the sizes of the muscles, heart, and other parenchymatous organs are relatively unaltered. This means that, since the total metabolism is elevated, there must be a state of hypermetabolism of these parenchymatous parts. In other words, such organs as the kidneys and

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heart are subject to the same type of change as is to be expected in hyperthyroidism[5].

Normal posture is disturbed in obesity. Excessive abdominal weight tends to cause excessive lumbar lordosis with strain and a compensatory dorsal kyphosis. Damage is likely to occur to the weight-bearing points. Varicosities and edema of the lower limbs are common.

Endocrine factors—Certain endocrine disorders are associated with types of obesity which have typical clinical manifestations and it is the consideration of these which forms one of the strongest arguments that metabolic factors which can cause peculiar distribution of fat may also be involved in causation of the overweight. A few such types are clearly classifiable, but many are nondescript.

Fröhlich's syndrome is associated with obesity chiefly about the trunk and attachments of the extremities. Adiposity of the face, neck, and trunk are found in Cushing's syndrome and adrenogenital syndromes. In hypothyroidism, there may be a generalized obesity which is never extreme, while hypogonadism leads to mild obesity characterized in the female by accumulations of fat about the hips and over the trochanters.

In all these types of endocrine disorders, the simple balance of energy intake and output appears to apply in so far as the amount of body fat is concerned. In Fröhlich's syndrome, the appetite is frequently large and the thirst great. A loss of sense of energy or definite somnolence may lessen expenditure. In hypothyroidism, low metabolism conserves body reserves. Food intake is increased in hyperinsulinism, while in hypogonadism expenditure of energy is lessened, probably due to factors governed directly by the gonadal hormones or factors other than nutrition itself. Therefore, in these cases, even though the basal metabolic rate may be slightly if at all reduced, the output of energy during the average day is lessened.

It has been shown that there is a difference in fat tolerance between individuals with outspoken pituitary disease and normal persons and Blotner[6] has demonstrated a difference in behavior of plasma cholesterol after a fat meal in obese patients and in those with diabetes insipidus as compared with normal persons. There is, however, no good evidence that the "fat metabolism hormone" or fat metabolism can be incriminated as a cause of obesity.

TREATMENT

There is probably no field in medicine in which quackery has been more rampant than in the production of so-called cures for obesity. Among the worst of these are the use of harmful drugs, deficient diets, and the indiscriminate use of laxatives. The most useful forms of treatment are the proper regulations of diet, the judicious use of exercise and, where low metabolism is present, desiccated thyroid.

Strenuous exercise is harmful in the extremely obese especially where there is reduced cardiac reserve. Some patients reduce more rapidly by rest than by exercise. This may be due to mild cardiac insufficiency and water retention. Massage is of limited value, having some effect in preventing some of the flabbiness which is likely to occur.

The important elements of a good reducing diet are:

1. Low caloric value
2. Adequate protein content
3. Adequate minerals
4. Adequate vitamins
5. Low carbohydrate content is preferable
6. Sufficient bulk.

Low caloric value is attained by restriction of fat more than by any other factor, the body supplying the fat and probably the fat soluble hormones to balance the diet.

Strange[7, 8] and his coworkers showed that diets very low in calories, if adequate in proteins, may be used safely without producing clinical symptoms and that they will maintain a positive nitrogen balance. Their original diet supplied only 360 calories daily. A high protein intake not only spares the body proteins, but by virtue of its slower absorption allays hunger longer than carbohydrates.

Most patients do well on not less than 0.85 grams of protein per kilogram of body weight calculated on a basis of ideal weight, since the size of the muscular and parenchymatous organs is not altered with gain in weight.

Where the mineral content of the diet is low, it may be advisable to prescribe calcium as calcium gluconate tablets in amounts of 2 to 4 grams daily, as basic calcium phosphate, or calcium lactate. It is considered good practice to use calcium regularly in all cases in which much weight is to be lost.

Almost all reducing diets are low in vitamin B. This may be supplied in the form of yeast tablets such as Mead's, each of which contain 45 Sherman units of B_1. Six such tablets each day probably supply an amount adequate for maintenance. Capsules, such as hepicoleum compound (Lilly) or other similar capsules are useful and supply vitamins A and D in sufficient quantities without enough fat to add significantly to the caloric total. Larger quantities of B_1 may be advisable at times and can readily be supplied as capsules of 3 to 10 mg. of the crystalline product.

Low carbohydrate diets tend to lessen stimulation of the insulogenic mechanism and cause less lowering of blood sugar levels than those higher in carbohydrate. Diets containing only 40 to 50 grams of carbohydrate per day cannot be very bulky but 100 grams is sufficient to produce a

diet more bulky than can be taken comfortably by many patients. Adequate bulk may be attained with a diet of 800 calories per day as shown below:

800 Calorie Diet

Content: C — 82.5 P. — 69.7 F — 21.4
Calc. .698 gm. Phos. 1.245 gm. Iron. 13.51 mg.

	Household Measurem'ts	Weight in grams
BREAKFAST		
Fruit	1 serving	100—10%
Egg	1	50
Whole wheat bread	½ slice	15
Butter	½ square	5
Coffee, tea, or Kaffee Hag	As desired	----
LUNCHEON		
Clear broth	As desired	
Lean meat	2 ounces	60
Dry cottage cheese	1½ ounces	45
5% vegetable (cooked)	½ cupful	100
5% vegetable (raw)	1 cupful	100
Fruit	1 serving	100—10%
Skimmed milk	1 glassful	200
DINNER		
Clear broth	As desired	
Lean meat	2½ ounces	75
Crab, shrimp, or lobster	1½ ounce	45
10% vegetable (cooked)	1/3 cupful	100
5% vegetable (raw)	1 cupful	100
Fruit	1 serving	100—10%
Skimmed milk	1 glassful	200

Servings of fruit are arranged to contain 10 gm. of carbohydrates.

The protein in the diet may be supplied by a large variety of meats, all of which must definitely be lean. Proteins which contain an insignificant amount of fat are useful in bringing up the protein content. Such proteins are egg whites, dry cottage cheese, and such seafood as shrimp, lobster, or crab.

It is important to remember that the individual need of the patient must be met to a large degree. The diet may be weighed but usually careful measuring is sufficient.

The most important items in the satisfactory use of the diet are the knowledge of exactly what is to be prescribed and the willingness of the patient to cooperate fully.

It is relatively simple to predict in advance with a fair degree of accuracy the amount of loss in weight that can be expected from a given diet. This serves more than one purpose. It indicates definitely to the patient and to the physician what may be expected. A short, obese individual with a low basal caloric requirement may be unable to lose more than one or two pounds per week, while a very large patient may lose as much as five pounds per week. The expected rate of loss in weight may be calculated in the following manner: The basal caloric requirement of an individual of a given age and height can readily be calculated from the Aub-DuBois tables when the basal metabolism is determined. The total caloric requirement for a day amounts in the average individual to an additional 30 to 50 per cent. This includes the elevation of metabolism due to specific dynamic action and exercise.

If we deduct from this the number of calories supplied by the diet, the **daily caloric deficit** is

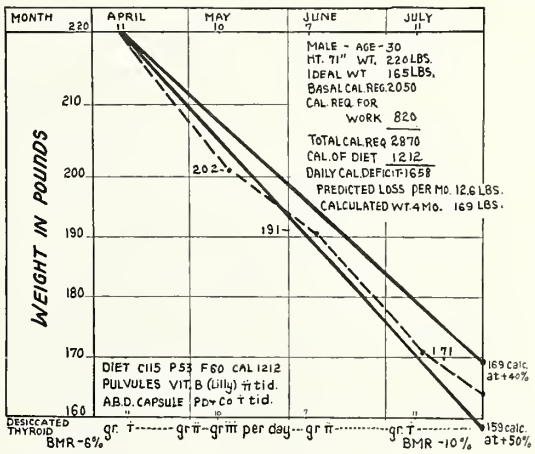


CHART 1

obtained. These calories are supplied from the body almost entirely as fat. This figure then, divided by 9.3 gives the number of grams of fat lost per day. Bozenraad[9] has shown that water is combined with the fatty tissue of the body in the amount of about 14 per cent of the weight of the tissue mass so that, of the total weight lost, 14 per cent will be water. This may readily be changed from grams to pounds and calculated in weeks or months.

Wilder[10] has shown that working on this basis the daily caloric deficit multiplied by the factor 0.002* represents weight loss in pounds per week.

Chart 1 demonstrates the method by which weight loss can be predicted and maintained on moderate restriction of calories. The basal metabolic rate was maintained in this case by the use of varying doses of desiccated thyroid. It can be seen from the rate of loss in weight that the metabolic rate never exceeded the calculated amount to any great degree. At the end of July,

* The factor 0.002 is obtained as follows: D (caloric deficit) $\div$ x 9.3 = grams of fat lost per day. Grams of fat lost per day x $\frac{100}{86}$ = grams of weight lost per day, where fat tissue contains 14 per cent water. Grams of weight lost per day x 7 = grams of weight lost per week. Grams of weight lost per week x $\frac{2.2}{1000}$ = pounds lost per week. Thus the pounds lost per week are $\frac{D}{9.3} \times \frac{100}{86} \times 7 \times \frac{2.2}{1000}$ which is D x 0.0193 or approximately D x 0.002. If 30 is substituted for 7 in the formula D x 0.00825 or approximately 0.008 is obtained which represents pounds lost per month.

after having been maintained for three weeks on one grain of desiccated thyroid per day, the basal metabolic rate was minus 10 per cent. It is interesting to note in this instance that, if the fat loss from the body is added to the diet, the figures C. 115, P. 53, F. 244 are obtained, an antiketogenic ratio of 1:1.8. In a case of this kind, if a very low caloric diet had been used containing, for instance, C. 30, P. 70, F. 15, Cal. 535,

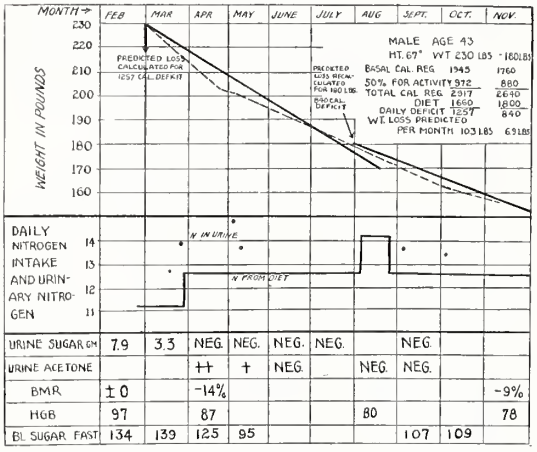


CHART 2

the caloric deficit would become 2,370 supplying 263 grams of fat per day from the body—the total daily consumption would be C. 30, P. 70, F. 278 with a ketogenic ratio of 1:2.8 followed probably by ketosis which would produce untoward symptoms. Some individuals appear to bear a high ketogenic ratio quite well but many do not. This example serves, however, to illustrate the point that, in individuals weighing 250 pounds or more, considerable ketosis can be expected if diets very low in carbohydrate and with a caloric value of 500 to 600 are prescribed.

The second chart illustrates the continued rate of weight loss in a man with mild diabetes mellitus. The rate of weight loss calculated on a basis of 40 per cent increase over basal calories exceeded this rate at first. A new calculation was made after the patient had lost 50 pounds in weight, since his caloric requirement had fallen about 200 per day. Note the negative nitrogen balance in spite of an intake of 80 to 90 grams of protein daily for most of the time indicated. Sugar disappeared from the urine completely after March. Ketosis is seen during April and May, the basal metabolic rate, hemoglobin, and fasting blood sugar levels fell. No thyroid was given at any time. Additional vitamins A, B, and D, and calcium were prescribed. The diet between the end of March and the first of August was C. 205, P. 80, F. 60, and from the end of August until the end of November, C. 225, P. 90, and F. 60.

Chart 3 illustrates the case of a woman, 52 years of age, whose weight had been reduced by diet from 296 to 212 pounds. The rate of loss of weight was erratic and during one month on a 900 calorie diet her weight had not changed. Because of this, she was placed in the hospital to investigate the cause of her resistance to treatment. During the first hospital day her weight fell 5 pounds. During 17 subsequent days, while on a diet of nearly 1,500 calories per day, she lost within 0.1 pounds per week of the rate calculated on a basis of allowance for 30 per cent increase in basal caloric requirement for activity in the hospital plus the exercise she was allowed.

In children with obesity, the caloric intake has generally been extremely high compared to their actual requirement and young people will usually not adhere to a very low caloric diet. It is very seldom that one sees the case of a boy or girl in the early teens in whom reduction in weight does not take place at a relatively rapid rate if a diet is prescribed which is as much as 20 or 30 per cent over the basal caloric requirements for their ideal weight. Calculation of school lunches may be helpful.

There are many practical points in the handling of such diets. They should not be too rigid so far as unimportant details are concerned. For many patients, an addition of three level teaspoonfuls of sugar per day makes the differ-

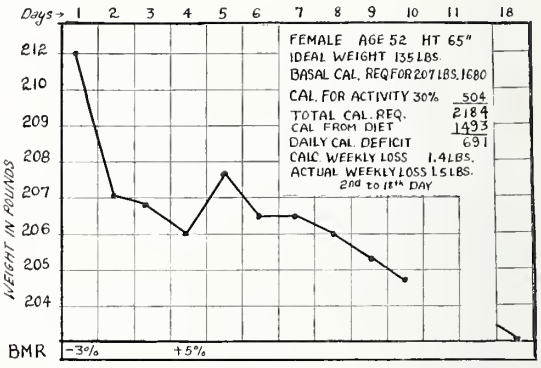


CHART 3

ence between following and not following the diet and adds only about 40 calories to the daily intake. Such things as tea, broths, beef extracts, mineral oil dressings, lemon juice, and vinegar can be used freely. Small amounts of catsup, chili sauce, or pickles may make an otherwise unattractive meal tasty.

It is important that the patient keep in touch with the physician at regular intervals if loss of a large amount of weight is to be accomplished. Most patients, if responsible to a physician who is definitely interested in the details of their progress, will do very much better than if left to their own devises after the physician has prescribed the diet. A display of doubt, definite accusation of blame, flattery, praise, encourage-

ment, and above all confidence on the part of the physician can be evoked as aids in maintaining the progress which is expected.

In the beginning of treatment several requirements are necessary so far as laboratory investigation is concerned. Any endocrine abnormality should be investigated and treated. The basal metabolic rate should be determined and blood counts should be made. This should be repeated at intervals, since changes may occur during the course of reduction of weight. Iron can frequently be given to advantage in the form of Blaud's mass or ferrous sulphate. If calculations indicate water retention, moderate restriction of water and salt intake may prove necessary to the accomplishment of the weight loss which is needed. Occasionally the use of diuretics is of value. As indicated previously, desiccated thyroid in doses of ½ to 3 grains daily can frequently be used to advantage but in all cases the patient should be observed carefully and great caution should be taken in prescribing thyroid for individuals with an already overloaded circulatory system since in such instances hypometabolism may be a positive advantage to them. The total daily nitrogen output may indicate an excessively large loss of protein. In cases in which large amounts of weight are to be lost, sufficient protein should be added to prevent negative nitrogen balance.

If the above principles are adhered to carefully, individuals may lose as much as 200 pounds of weight with very little discomfort and usually much improvement in energy and sense of well being. It is important to remember that when normal weight is attained, the problem is still unfinished and the patient should be taught to return gradually toward a normal diet so that the old dietary habits will not be fallen into again and the condition be caused to recur.

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Care of Elderly Patients

We owe it to our patients and ourselves to keep cancer in mind; and we owe it to them to say nothing about what is in our minds until we have pretty positive evidence. Examine the rectum, sigmoid, breast and cervix yourself, and have X-ray examinations made of the stomach, on slight suspicion; but don't tell the patient you are examining to see if he or she has cancer. Make the examination to find out what he or she has; to rule in something, **not to rule out** cancer.

Remember that men have been operated on for gallstones, when the symptoms were the pains of locomotor ataxia, and I know of one case in which the reverse mistake was made.

It is in chronic diseases of the old that it is most essential to individualize your management; in which one person with a certain disease should have one treatment, another a quite different treatment; one should have a surgical operation, the other be carried along without operation.

We must not only protect our old patients from the younger folks in the house, but protect the young from the old. Who can tell how many children are infected by an old member of the household whose fibroid phthisis bothers him very little ? When it is recognized and accepted that most patients with tuberculosis must be treated at home and that the family doctor can do this reasonably well, practically all cases will be traced to their source and just such cases in elderly persons will be shown to have supplied the bacteria in a great number of cases in children.

We should accustom ourselves and teach our patients to think of glaucoma before thinking of cataract as a possible explanation of a case of eye disease, and consider it to be glaucoma until it is proved to be something else. Be sure of your ground before advising a patient to wait for cataracts to ripen. And glaucoma may develop in an eye that already has a cataract.

Taking care of the health of old folks includes protecting them from quacks and from faddists in the regular profession. Some of our patients read about these dangerous persons in the papers; some get personal letters; many are told about them by well-meaning friends. The A.M.A. usually has information on advertising quacks and is glad to supply it. Telling patients about the rise and fall of similar fads in medicine will convince most that this particular one is off the same bolt of cloth as those that have been tried and found wanting.—John Quincy Myers, M.D., Charlotte, N. Carolina. So. Med. and Surg., Vol. 100, No. 6, June, 1938.

OFFICIAL REPORT OF THE HOSPITAL OBSTETRICAL SOCIETY OF OHIO, FOR THE YEAR 1937

Compiled and Edited by BURDETT WYLIE, M.D., *Asst. Secretary*, LAKEWOOD, OHIO

THIS report constitutes an analysis of the statistics obtained from the monthly reports submitted by member hospitals to the Hospital Obstetric Society of Ohio, during 1937.

The purpose of this analysis, as well as the monthly reports upon which it is based, is to accumulate certain fundamental data, hitherto not available, which lies back of the Maternal and Fetal Mortality Rates with which we have all been more or less familiar in the past. For example, the maternal mortality statistics may tell us how many women died in a certain area during a certain period from, let us say, ectopic pregnancy. However, no data was available to indicate how many ectopics there were who did not die and lacking this information it is obviously impossible to evaluate intelligently the results of treatment or the significance of this particular complication in the gross maternal mortality rate. The same may be said for any other of the serious complications encountered in both the mothers and babies. When this data is available, on the other hand, it will be possible to spot the weak links in our care of pregnant women and their babies. Through correlating this information with the various methods of treatment employed we will be in a position to point out where the greatest danger lies and possibly to offer suggestions for improving the results.

This report is the first of what is hoped to be an annual summary of obstetrical results in Ohio hospitals. This study was begun in January, 1937. During the year reports were received regularly from 41 of the 46 member hospitals. Partial reports were received from three of the remaining institutions, leaving only two member hospitals in the state not reporting at all. The number of deliveries reported ranged from 2,144 in one institution to a year's total of 202 deliveries in another.

The cases cared for were distributed as follows:

Abortions (All cases prior to 6½ months)	2,547
Ectopic Pergnancy	242
Viable, Deliveries (6½ months and after)	34,438

In addition, during the last half of the year (the item was not asked for on the first form used) 130 women were admitted after delivery for post partum care. Thus we are justified in the assumption that between 250 and 300 additional, more or less complicated cases, were cared for or a total of approximately 37,500 puerperal cases handled by our member hospitals during the year.

The form used for the monthly reports has been designed to avoid cumbersome detail and yet give the essential information necessary to group cases as to duration of pregnancy, method of delivery, maternal and fetal complications and the probable cause of death in those cases lost.

Analysis of some of the data obtained follows:

METHOD OF DELIVERY

In considering the Method of Delivery, all reportable births (4½ months or over) are included. These totaled 34,995. The delivery methods were:

Spontaneous	16,873	47.9% of Births
Operative	18,122	51.9% of Births

Further analysis of the Operative Deliveries shows:

Forceps	Number	% of Births
High	200	0.6%
Mid	1,880	5.4%
Low	8,845	25.3%
Prophylactic	4,091	11.7%
Total	15,016	43.0%

The Author

Dr. Wylie is a graduate of Western Reserve University School of Medicine, 1929; diplomate American Board of Obstetrics and Gynecology; member of the obstetrical department, Fairview Park Hospital; assistant visiting obstetrician at Lakewood City Hospital and Cleveland City Hospital; demonstrator in obstetrics at Western Reserve University School of Medicine.

Submitted August 12, 1938.

Throwing the Spontaneous and Simple Forceps together we find:

Spontaneous, Low and Prophylactic	29,809	85.2% of Births
Remaining Operative Cases	5,185	14.8% of Births

Caesarean Section	Number	% of Births
Classical	506	1.45%
Low Cervical	378	1.07%
Other (Porro, etc.)	32	.09%
Total	916	2.6%

Other Operative Deliveries ocurred as follows:

	Number	% of Births
Breech Extraction	1,397	4.0 %
Podalic Version	682	1.95%
Embryotomy	26	.07%

Operative inductions were reported in 499 or 1.4 per cent of all births. During the second half of the year 42 patients were reported as having some other non-delivery operative interference. During the same period there were 67 spontaneous deliveries associated with some form of operative interference.

OBSTETRICAL COMPLICATIONS

It should be noted that an unfortunate discrepancy exists between the stage of gestation for which a birth certificate is required (4½ months) and that at which a case can reasonably be considered as an obstetrical case (i.e. 6½ months "viability"). Analyzing the complications encountered in mothers past "viability", we find:

Hemorrhage	Number	% of Births
Plac. Prev.—Cent.	62	.18%
Plac Prev.—Marg.	148	.43%
Prev. Total	210	.61%
Premature Sep.	166	.48%
Total A.P. Hemorrhage	376	1.09%
Post. Part. (1st 24 hours)	263	.76%
Post. Part. (Aft. 24 hours)	29	.08%
Total P.P. Hemorrhage	292	.84%
Hemorrhage Total	668	1.93%
Toxemia		
Toxemia without convulsions	859	2.49%
Toxemia with convulsions	135	.39%
Total Toxemias	994	2.88%

MORBIDITY TEMPERATURE

"Morbidity temperature" is defined as any elevation of mouth temperature, regardless of cause, to 38. C. (100.4 F) or over on any two consecutive days, not including the first 24 hours after delivery". In so much as some of the hospitals reporting were not familiar with this rule when the study was started the resulting figures are somewhat low. It is expected that this figure will be increasingly significant in future reports, particularly when studied in the light of an honest evaluation as to whether the morbidity is of known extra-genital or extra-hospital origin.

	Number	% of Births
Morbidity Temperatures	1,662	4.8%
Morbidity of Known		
Ext. Genital Origin	360	21.6% of Morbidity
Ext. Hospital Origin	269	16.2% of Morbidity

OTHER SERIOUS COMPLICATIONS

Under this heading there were listed a great variety of complications. Space does not permit listing all the individual conditions reported but arranged in groups they appeared as follows: Kidney and urinary tract, 111 cases; respiratory complications, 94 cases; cardiac conditions, 94 cases; acute nonpuerperal infections, 43 cases; circulatory system, phlebitis, etc., 41 cases; tuberculosis, 26 cases; diabetes, 14 cases; nervous and mental complications, 6 cases; intestinal obstruction, 3 cases; toxic goitre, 1 case; carcinoma of the cervix, 1 case.

Accepting the gross figures, as reported, we find:

Other Serious Complications	583	1.56% of Births

Summary of Condition on Admission:

Known Pathology on Admission	1,642	4.76% of Births
Normal on Admission but complications developed during Hosp. stay	2,134	6.19% of Births
Total Maternal Complications	3,776	10.95% of Births

From this data it is seen that of the complicated cases 43.5 percent were admitted to the hospital with known pathology.

MATERNAL MORTALITY

Considering the maternal deaths and classifying them so far as is possible according to cause

and whether or not they were primarily obstetrical, we find:

		Deaths Obstetrical	Deaths Non-Obstetrical	Total
1.	Abortions		49	49
2.	Ectopic		5	5
3.	Early Toxemia		3	3
4.	Late Toxemia	18	2	20
5.	Cardiac	5	4	9
6.	Hemorrhage	25	0	25
7.	Shock	6	1	7
8.	Anesthesia	2	0	2
9.	Non-Sep. Embolus	0	1	1
10.	Ante Partum Pneumonia	0	5	5
11.	Post Partum Pneumonia	4	0	4
12.	Septic Embolus	7	0	7
13.	Post Partum Infection	30	0	30
16a.	Ruptured Uterus	3	0	3
b.	Uremia, Pyelitis, etc.	3	3	6
c.	Diabetes	0	1	1
d.	Adherent Placenta	1	0	1
e.	Cav. Sinus Thrombosis	0	1	1
f.	Breast Abscess	1	0	1
g.	Cerebral Hemorrhage	0	2	2
h.	Unknown	1	0	1
		106	77	183

FETAL COMPLICATIONS AND MORTALITY

These figures are for the last half of 1937, only, covering 18,503 reportable births.

Complications	Cases	% Births	Deaths	Mort.	Deaths % of
Prematurity					
Under 6½ months	164	.89	164	100. %	17.7 %
7 months	303	1.67	136	45. %	14.7 %
8 months	296	1.6	85	28.7%	9.2 %
Total Prematurity	763	4.12	383	50.2%	41.4 %
Deformities	302	1.66	74	24.5%	8.0 %
Birth Injury	107	.58	74	69.0%	8.0 %
Impetigo	70	.38	----	----	----
G. C. Ophthalmia	6	.03	----	----	----
Pneumonia	8	.04	8	100.0%	.86%
Enteritis	27	.15	5	18.5%	.54%
Other Infections	82	.44	----	----	----
Atelectasis	41	.22	41	100.0%	4.43%
Asphyxia	96	.52	96	100.0%	10.38%
Prolapsed Cord	34	.18	34	100.0%	3.68%
Macerated	65	.35	65	100.0%	7.03%
Erythroblastosis	4	.02	4	100.0%	.43%
Hemorr. Disease of N.B.	5	.03	5	100.0%	.54%
Other Conditions	37	.20	37	100.0%	4.00%
Not Stated	99	.53	99	100.0%	10.7 %
	1746	9.43	925		

The above data is not complete and the true figures would probably be somewhat higher as the cause of death was not always given. Stillbirths and neo-natal deaths have not been separated.

MULTIPLE BIRTHS

Included in the 34,995 Reportable Births for the state during the year were 3 sets of triplets, 334 sets of twins. This would mean that there were 34,654 mothers delivered. The incidence therefore would be:

Triplets	1 in 11,551 Deliveries
Twins	1 in 104 Deliveries

FETAL DEATHS
(According to Method of Delivery)

	Births	Deaths	Mortality
Spontaneous	8,859	202	2.3 %
Forceps	7,958	123	1.54%
Caesarean	476	45	9.45%
Version	366	40	10.9 %
Breech	745	69	9.25%
Embryotomy	14	14	100.00%

The above figures cover the combined stillbirth and neo-natal deaths during the last half of 1937.

The relatively high death rate for spontaneous births can be partially explained on the fact that the majority of macerated and premature births were delivered by this method.

Unfortunately all the figures are somewhat low since the method of delivery was specified in only about one-half of the babies who died. As a result little significance should be attached to these mortality rates.

MORTALITY SUMMARY

Fetal

During the year 34,995 reportable births were included. In this group there were:

	Cases	Mortality	
Stillbirths	990	2.83%	
Neo-Natal Deaths	767	2.19%	
Total	1757	5.02%	Gross Fetal Death Rate

Maternal Deaths

	Cases	Deaths	Mortality
Abortions	2,547	49	1.95%
Ectopic Pregnancy	242	5	2.06%

Puerperal Death Rate 5.38/1000

This figure is based upon the total number of deaths occurring during or because of pregnancy, calculated against the number of live births, and corresponds with the figure calculated by the Bureau of Vital Statistics.

Obstetrical Death Rate 3.08/1000

This is the figure of real significance so far as obstetrics is concerned since it is based on the number of deaths from obstetrical causes, calculated against the number of "viable" deliveries, (6½ months or over). It does not include deaths from abortion, ectopic pregnancy and other non-obstetrical causes but is a true index of the obstetrical results being obtained.

ACTIVITIES OF THE OBSTETRICAL SOCIETY OF DAYTON, OHIO.

By CLARKE SULLIVAN, M.D., Dayton, Ohio

THIS report concerns the history, formation and results of one year's activities of the Obstetrical Society of Dayton.

All of us, of course, belong to our County Medical Society. From time to time various members of the group read papers before that organization, but these few scattered programs were not satisfying to those of us most interested in obstetrics. We felt the need for more concerted action. For a long time we realized that our mortality rate was much too high. We pondered over that distressing fact but didn't quite know what to do about it. We knew we were not ready for any strong-armed methods.

An analysis of our local situation indicated at least three contributing factors:

1—Although Dayton is one of the larger cities in Ohio, it still has its Main Street. It is big enough to put on city airs, but small enough for gossip to flourish over the back fence. Our population justifies three thriving hospitals where fine work is done every day but in spite of that, medical reputations were made and injured with surprising frequency over the afternoon bridge tables. Perhaps in that particular our fair city is not alone.

2—It may be that our doctors were in a measure responsible for our unhappy condition. Some of us were apparently the victims of petty personal jealousies and even the various hospital groups were occasionally critical of the work being done in the other institutions. Damning with faint praise, a shrug of the shoulder, or an intimation that some particular result might have been avoided had some other obsetrician been in charge, was undoubtedly the cause of some of our medical unpleasantness. An atmosphere of suspicion and distrust was too prevalent. This was by no means universal, but its sporadic appearance caused concern.

3—With the unfavorable publicity that had been given to maternal care and mortality in newspapers and magazines all over the country, the general public was impressed with the responsibility reposed in the obstetrician. He was put on the spot, so to speak, with the result that personal propaganda was rampant, egoism was too apparent and consultations were almost unheard of. Asking for an obstetrical consultation, even a short time ago would have been an acknowledgment of inferiority. There was a noticeable lack of team work.

This brief and rather sweeping introduction furnishes the background of our local situation and brings us up to May, 1937, one year ago when the State Medical meeting was held in our city. At that time your present Chairman was the secretary of the Obstetrical Section. He thought it would be a gracious gesture to entertain all of the visiting obstetricians at a luncheon. We all agreed and appropriate committees were appointed. Perhaps some of you may remember that luncheon—those of us in Dayton considered it a success. When the time came to settle up the affair and disband our temporary organization we were sorry because we found much to our surprise that we liked each other. We had discovered that it is difficult to sit side by side at a good meal and speak unkindly of each other the next day. Men who had scarcely spoken before now were calling each other by their first name. Directly and indirectly it was astonishing what that luncheon did for us in Dayton.

So we formed a permanent organization and from now on the story will be more pleasant to relate because we believe it is a record of accomplishment.

Our active members were the consultants, senior and junior staff members of our three hospitals. We provided for associate members who are men actively interested in obsetrics but decided at least for the first year, until we had demonstrated that we were a going concern, to confine our stated meetings to the active membership. We wished first of all to solve, unmolested, our own intimate hospital problems.

The purpose of our organization was fundamentally to make child-bearing safer and as written in our constitution our objectives were: to develop through acquaintance and good fellowship a better understanding; to co-operate in obtaining the best possible record for our community; to assist the County and State Organizations when obstetrical programs when being arranged locally; to study maternal and fetal mortality in our hospitals and elsewhere, and to determine better methods of managing and treating obstetrical complications. For the benefit of the patient and our own protection we also pledged ourselves to call consultation in all complicated cases. If the financial status of the patient justified it, these consultation services were given gratis.

Our regular meetings, always evening dinner affairs, were held once a month; at no time did we conflict with the date of any other medical

The Author

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Presented by request before the Section on Obstetrics and Gynecology, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, May 11 and 12, 1938.

or staff meeting. The executive committee made all the plans and arrangements, determined matters of policy and in general kept the wheels moving. We studiously avoided medical politics. Our chief consideration was to stimulate good fellowship and this was done largely by having an excellent dinner served under favorable circumstances in our best hotel, followed by an animated, interesting program—an entire evening devoted to comradeship and better obstetrics that no one could afford to miss. You will remember the experiment of Pavlow; how he rang a bell every time he fed a dog and how after a while the dog's gastric juices flowed whenever he heard the bell. Well, our average attendance was better than 95 per cent and when one considers the vicissitudes of our work, 95 per cent is something.

During the year we intimately and thoroughly delved into more than 40 pertinent obstetrical subjects. These covered a wide range; from cramps in the legs to the management of occiput-posterior, from heart burn to hydatid mole, from hyperemesis to ruptured ectopic, from impetigo to dehydration. No prepared papers were required of the appointed discussants. Each man in turn dug down into his own experience—there were many recitations of success and many reports less glamorous, but all of benefit to the man at the bedside. The conservatives and those inclined to more radical measures sat side by side and every man's opinion was respected. The older men with riper experience seemed better acquainted with pathology and the abnormalities, the younger men fresh from the universities contributed new ideas and theories and no one went away empty handed. Every meeting was a refresher course. There never was any friction, no dissention or discord—just a group of earnest doctors endeavoring to solve their common problems, contributing something here, learning something there, and trying to be mutually helpful. We got so much out of these conferences because we put so much into them.

On one occasion we officially entertained the pediatricians when subjects of mutual interest were discussed. At another time the urological group were our guests and a round table on pyelitis as a complication of pregnancy was indulged in.

On still another occasion, Dr. Thomas Sharkey, a pupil of Joslin, gave us a most instructive and valuable talk on "Diabetes as An Obstetrical Liability." His remarks were so illuminating that a digest of his paper is incorporated in this report. With the administration of insulin, the diabetic woman is now able to bear children, thus issuing a new challenge and creating a new field for the obstetrician.

Aside from sharpening our ideas on the subjects under consideration these meetings demonstrated the broad basis of interdependency among the various specialties with obstetrics and were fine examples of medical cooperation and solidarity. In one way and another the activities of our little group were whispered around so that many men similarly interested and some from neighboring towns, asked to be put on our mailing list and came to our meetings as paying guests. Thus the leaven worked.

Previous to the formation of our organization considerable adverse and unwarranted criticism occurred in our local press; not specially about Dayton, but pertaining to obstetrics in general. Naturally we were agitated and disturbed. The most effective methods of dealing with this situation were debated and many conferences were held. To help solve this problem we finally elected to honorary membership the medical heads of our City and County Health Departments. These men were at once our staunch allies. They frequently appear before lay groups, parent-teacher organizations and noontide clubs, and shortly thereafter there was quiet on the newspaper front. The March issue of our Public Health Bulletin having a circulation of over 5,000, carried an article on our local maternal mortality which was a magnificant defense and its calming influence was immediately apparent.

The secretary of any organization should have a particular flair for his job and serve as its spark plug. In that respect we were more than fortunate. Usually there is nothing so dull and dismal as the reading of the minutes of a previous meeting, but in our case the records were so interesting and valuable, that at the end of the year they will be mimeographed and a copy given to each member.

What has this year's intensive study and our experiment in good fellowship accomplished? In the first place, speaking collectively, we are better obstetricians; also it would be difficult for the outsider to realize the change that has occurred in our professional intercourse. Formerly we were for the most part individualists and free lances; now we are a homogenous, purposeful group of doctors working shoulder to shoulder, all striving for a common end. Consultations are more frequent, one hospital alone reporting 47 in the past year. In fact, there is seldom a complicated case that has not had the benefit of at least one consultation with the net result that our mortality rate has noticeably decreased. In 1935 it was 8.04 per 1,000 living births. We were not especially proud of that. In 1936 when we really became collectively conscious of the true situation it was 5.29. In 1937 it had been reduced to 2.80. These figures are quoted from a recent letter from Dr. Scott Runnells, the Secretary of the Hospital Obstetrical Society of Ohio, and should speak for themselves. They indicate, we feel, that the doctors of our community have at last found a way to get from behind the obstetrical eight ball.

DIABETES AS AN OBSTETRICAL LIABILITY

By THOMAS P. SHARKEY, M.D., DAYTON, OHIO

A NEW challenge has been issued to the obstetrician. Insulin, one of the greatest medical discoveries of all time, with its life-saving and life-prolonging qualities, has created a new problem for the obstetrician by enabling the pregnant diabetic woman to bear children. The condition in general before the discovery of insulin was stated by Meakins, "In the records of the Montreal General Hospital up to 1923 there was not a single record of a diabetic woman going through a normal full-term pregnancy."

It is estimated by Joslin that there are approximately 500,000 diabetic patients in the United States at the present time and that about 2,500,000 more will develop the disease before they die. White states that there are some 100,000 diabetic women of child-bearing age in this country. At the known pregnancy rate of 10 per cent, about 10,000 diabetic women, or 1,500 annually, are concerned. It is quite probable that this number will increase in the future.

Glucosuria occurs in 35 to 60 per cent of non-diabetic pregnant women according to various authors. The modern obstetrician will not accept the presence of glucose in the urine of his patient as of no consequence until he has excluded diabetes by careful clinical and blood chemical studies.

The diabetic patient who becomes pregnant is faced with a much more hazardous course than the non-diabetic patient. Her diabetic state, with its widespread implications, constitutes a dangerous situation when pregnancy is added. The physiological changes of pregnancy such as increased metabolism, with an increased demand on carbohydrate metabolism, glycogen depletion, lowered alkaline reserve, cholesteremia and ketonuria may produce serious pathological complications of diabetes, that may cause the death of the mother, fetus, or both.

The mother faces the ever-lurking danger of diabetic coma during her pregnancy or following labor if not carefully controlled at all times. The mother must be given an adequate diet for herself and her baby, one that will not predispose to ketosis or to obesity, and the judicious use of insulin if necessary must be maintained throughout her course of pregnancy with the realization of the changes occurring in the diabetic state with each trimester. The mother with diabetes faces a mortality rate of 3.8 per cent, or six times as high as a non-diabetic mother. Toxemia and eclampsia occur 50 times as frequently in the diabetic patient and the onset is so insidious that it can easily be missed until after the death of the foetus. A rise in the serum prolan with a fall in the estrin after the sixth month of pregnancy usually precedes toxemia.

The Author

● Dr. Sharkey is a graduate of the University of Cincinnati College of Medicine, 1930; associate member, American College of Physicians; assistant director of diagnostic laboratories, Miami Valley Hospital; consultant in medicine at Dayton State Hospital.

An analysis by White of 306 pregnancies occurring in diabetic patients from 1898 to 1936 reveals that only every other one terminates successfully in a living birth. Multiparous pregnancies revealed only 50 per cent successes. Stillbirths occur six times as frequently in the diabetic patient as in the non-diabetic patient and in two-thirds of these maceration was present. Over one-half of the fetuses weighed over eight pounds. The greatest single factor influencing this condition was toxemia which occurred in 80 per cent of the patients. The incidence of abortions have dropped from 22 per cent in the pre-insulin era to 10 per cent in the insulin era, due to better control of the diabetes.

Congenital defects occur about twice as frequently in the child born of a diabetic mother. Hypoglycemia occurring in the infant has occurred from maternal insulin or from fetal endogenous insulin and may produce severe convulsions or death. We have routinely determined the blood sugar of all infants at birth and have given glucose subcutaneously. Asphyxia is the most serious problem and is the cause of death during this period in 30 per cent of cases. All of our infants are given the usual respiratory stimulants and immediately placed in a Drinker respirator for at least 24 hours. Artificial milk feeding is usually necessary since normal lactation is infrequent.

The obstetrician in the future will see more and more patients who developed diabetes during childhood. In these patients the mortality and morbidity rates of both the mother and baby are much higher than has been already quoted.

The obstetrical management of these cases is debatable. Every patient should be treated on an individual basis and all the evidence carefully weighed before making a decision as to the choice of the method of delivery. Prolonged labor, normal or induced, is dangerous to the diabetic state of the mother as well as to the more vul-

*Digest of a paper read before the Obstetrical Society of Dayton, presented by request before the Section on Obstetrics and Gynecology, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, May 11 and 12, 1938.

nerable foetus. The dangers of sepsis following damage to the cervix and perineum, requiring later surgery, must be considered. The question of allowing future pregnancies with the high maternal and foetal mortality and morbidity must also be evaluated. Normal delivery is not the best answer to these patients with toxemia in the last two months of pregnancy since the baby will be dead before labor can be induced. Other medical, surgical, or diabetic complications may help decide the issue. Cesarean section during the eighth month appears to be the method of choice at the present time, especially in primipara and severe diabetic patients with long duration of the disease. The incidence of stillbirths has been reduced by this method and many of the dangers to the mother are eliminated. There has been no maternal mortality in Joslin's series or our own by this method, and in one of our own cases cesarean section saved the mother's life by enabling the surgeon to perform a hysterectomy following the failure of the uterus to contract with resultant intrauterine hemorrhage. Sterilization has been done in all of our patients to avoid future pregnancies. It must be remembered that each infant born of a diabetic mother is an hereditary carrier of the disease, and if diabetes is present in the genes of both parents the potentiality of the infant developing diabetes is based upon Mendelian laws, as a recessive characteristic.

The obstetrician must realize that the management of coincidental diabetes mellitus and pregnancy is a complex problem that commences before the patient becomes pregnant and ends not with the delivery of the infant but perhaps for years therafter. Only the future can predict the effect of pregnancy on the diabetic patient and provide the best solution to this problem.

Acne Therapy

Dietary treatment alone has rarely resulted in a cure. The type of diet depends upon which school of thought we follow. If we believe in a low carbohydrate diet, our results seem about the same as when we allow a dominant amount of this factor. Undoubtedly, food sensitization does play some part, and chocolate, for example, should certainly be eliminated.

The endocrine factor in treatment has always appealed to the professional mind. This is natural, in view of the fact that acne is a disease of puberty and its future years only. I think we can say that no endocrine extract has been sufficiently successful to warrant a major place in our therapeutic attack. When anterior pituitary "S" fraction first came on the market, I used it experimentally on twelve cases. I gave a total of 150 injections to these patients. I undoubtedly got good results in the early adolescent type, and was able to prevent the menstrual flare-up in women. I found, however, that my cases relapsed on discontinuing the injections, and the patients were dissatisfied. There is a distinct question in my mind whether or not anterior pituitary is justifiable, except as an adjunct to other therapy.

Viosterol In Acne

The patient commonly asks the doctor if he "shouldn't have something for his blood." We also feel that the patient should be put in the best possible health. The missing elements, or the excess thereof, that cause acne to develop in the adolescent, should receive every intelligent consideration. It was in response to this need that, in 1933, I started, in acne cases, giving viosterol by mouth. This was simulated later by the results of A. Doktorsky and S. S. Platt. I read an abstract of this paper in January, 1934, in the Year Book of Dermatology. I then began to use vitamin D in all cases, and have continued it up to the present time. The use of vitamin D seemed to fit in where needed. It improved the patients' general nutrition; many of them put on weight, and the majority of them felt much better. Its use seemed rational. Vitamin D is synthesized in the skin on exposure to sunlight. Might not this be the factor that caused healing on ultra-violet therapy? Vitamin D is a mobilizer of calcium. It is probably withdrawn from its reservoir in the skin at puberty for the purpose of the utilization of calcium in growth of bone and muscle. Vitamin D has the further advantage of reasonable cost.

The subject of vitamin effects in the body is so large that I will not attempt to make a prolonged dissertation on the subject. The Council of Pharmacy and Chemistry state that the following are allowable claims in relation to vitamin D:

> Animal experimentation has shown that correction of an inadequate dosage of vitamin D results in the more economical utilization of calcium and phosphorus, and also that the undesirable effects of improper ratios of calcium and phosphorus in the diet can largely be overcome by normal intake of vitamin D. . . . It may be stated that vitamin D has a favorable influence on calcium and phosphorus metabolism.

Dr. C. D. Leake has pointed out that certain dangers exist in the unregulated intake of vitamin D preparations. He states that these symptoms are largely due to the substance "toxisterol," and that this preparation should be carefully guarded against in the manufacturing of the product. The symptoms brought on by vitamin D toxicity appear about two weeks after the high daily dosage begins. The patient is nauseated, dizzy, and has tingling in the extremities. There may also be vomiting, diarrhea, and polyuria. Mild symptoms of toxicity occurred twice in my series of cases.

In regard to dosage of vitamin D, we probably have considerable latitude. The statement is made that 200 drops a day may be given with safety to juveniles. The Council on Pharmacy and Chemistry of the American Medical Association suggests a maximum daily dose of 1,000 units in lay advertising. Larger doses, of course, may be given under the supervision of a physician. C. I. Read of Chicago, in a study made of the administration of highly concentrated vitamins of 10,000 X gave to three hundred patients, ranging from seven to seventy-two years of age, doses of from 3,000 to 2,760,000 international units daily, or a maximum of 920 times the normal antirachitic dose of 3,000 international units. This group of 43 patients showed symptoms of toxicity of varying degrees.—Merlin T. R. Maynard, M.D., San Jose, Calif.; California and Western Med., Vol. 49, No. 2, August, 1938.

CASE RECORD PRESENTING CLINICAL PROBLEMS

Adult Negress with pain in the chest, cough, and loss of weight, and albuminuria.

By HARRY L. REINHART, M.D.

AN adult colored female presented complaints of pain in the left chest, cough and loss of weight.

Her illness began about one year previously with a sudden onset of severe pain in the right hip, which radiated down to the toes. She also had polydipsia and polyuria, but no hematuria, dysuria or pyuria. About four months ago, she had an apparent recurrence of menstruation; cessation of menses had occurred six months previously. The bleeding was excessive, dysmenorrhea was marked, and blood clots were passed. Since then she has had leucorrhea, dyspareunia, and occasional bleeding post-coitus and post-douche. She has also noticed dyspnea on exertion, orthopnea, severe pleurisy in the left chest, a cough productive of large amounts of mucoid non-odorous sputum and severe attacks of vomiting. She had lost approximately 50 pounds of weight. Moderate constipation and low back pain have been present for one year but no night sweats or hemoptysia.

Physical examination reveals a well developed but poorly nourished colored female, 47 years of age. Temperature 101.8°, pulse 120, respiration 26, blood pressure 112/64. The skin is black, dry and scaling. Examination of the chest reveals an impaired percussion note in the region of the upper lobe of the left lung, anteriorly and posteriorly. Moist mucous rales are heard at the right base, anteriorly and posteriorly. The uterus is palpable above the symphysis pubis. Pelvic examination; introitus marital; cervix small. Uterus enlarged to the size of a four months pregnancy, firm, smooth, fixed. Adnexia not palpable. Rectal examination negative.

Laboratory Data: blood count: Hb. 5.1 gms.; RBC 1,620,000; WBC 7,200; PMN 71 per cent (25 per cent bands), lymphocytes 19 per cent, monocytes 10 per cent. Numerous subsequent blood counts revealed no significant variation from this count. Wassermann reaction and Kahn test, negative. Serum albumin 2.5 per cent (normal 4.6 per cent—6.7 per cent.) Serum globulin 6.4 per cent (normal 1.2 per cent—2.3 per cent). Blood serum calcium—10.8 mgm. per cent, (normal). Urine: Acid, reaction; S. G. 1.009; 100 mgm. per cent of albumin; 20-25 WBC/HPF; occasional coarse granular and pus cast. Bence Jones protein 9 per cent. Bone marrow, (sternal puncture): nucleated elements 54,000, RBC 1,370,000; megakocyocytes—none. Plasma cells 66 per cent, normal elements 34 per cent. X-ray of lungs—"Large spherical mass in upper portion of left chest, which is probably malignant, and general malignant involvement of skeleton, including skull."

Hospital Course. The temperature ranged between 98° and 102°, respirations between 20 and 30 until seventh hospital day. The course was rapidly down hill and she expired on her thirteenth hospital day.

Dr. B. K. Wiseman:

A review of the history only, as given, leaves one with little doubt that a malignant growth of some sort caused the death of this patient. The association of recent development of severe pain, with a rapid loss of weight of the order of magnitude of 50 pounds in an individual past 40 years of age is rarely found in anything else. The presenting complaint of cough, occurring with pain in the left side of the chest, immediately directs our attention to the possibility of a primary bronchiogenic cancer. However, further facts given in the history suggest that the probable primary focus is either in the reproductive organs (vaginal bleeding, leucorrhea, dyspareunia), or kidney (polyuria and nocturia), and that the severe pain in the hip and back, and the chest symptoms represent the effects of secondary growths from metastasis. A consideration of the additional facts supplied by the physical examination add little in clarifying the impressions gained from the history. The suspicion that there is pathology in the left chest is confirmed, but the character and significance of the lesion is not apparent from the description as given. The pelvic examination definitely implicates the uterus as a diseased organ, but the high incidence of fibroid tumors, especially in colored women, which will account for all the signs and symptoms given with reference to the organ necessarily forces one to be hesitant in interpreting the pelvic pathology as cancer.

Turning now to the laboratory data, the correct diagnosis becomes immediately apparent. The findings of a severe anemia, albuminous urine with casts and containing Bence Jones protein, and X-ray evidence of widespread cystic lesions in the bones with a "large spherical mass in the upper portion of the left chest which is probably malignant" does nothing more than confirm the impression of malignant growth with metastases obtained from the history and physical examination. However, the presence of hyperproteinemia with hyper-globulinemia, and the demonstration that the bone marrow contains cells consisting largely of plasma cells definitely identifies the neoplasm as of that variety known as plasma cell or multiple myeloma.

With all these facts thus available, the case, as given, now constitutes a rather classical example of multiple myeloma. I would like to point out,

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This is the thirty-third of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

however, that many, if not most cases of this disease do not present with these classical features, and the diagnosis is often not suspected until the autopsy findings are available. Because of this fact, certain clinical truisms are worthy of assembly and repetition with reference to this disease. Any patient in the cancer age, especially a male, who (1) develops bone pain, particularly backache with paraplegia, or (2) develops a recurring type of fever not readily attributed to infection, (common also with Hodgkin's disease) or (3) has a normochromic anemia and the blood shows either unusual rouleaux formation, autohemagglutination, unusually rapid coagulation of the blood (all due to hyperproteinemia) or upon the smear reveals plasma cells in the differential count, or (4) shows evidence of kidney disease with a renal insufficiency and nitrogen retention but without an elevated blood pressure, or (5) develops pathologic fractures (common also in hyperparathyroidism), should be suspected of having multiple myeloma. If these points are kept in mind, few cases indeed of this disease will come to autopsy without the proper diagnosis having at least been entertained as a possibility.

This brings up to a consideration of actually establishing the diagnosis when once the disease is suspected. There are probably only two pathognomonic features that enable one to prove the diagnosis beyond question and both are present in the case under discussion. The first of these is the existence of hyperproteinemia with hyperglobulinemia (Feller and Fowler, 1938). Hyperproteinemia may occur in various other diseases, particularly syphilis, myelogenous and lymphatic leucemia, lymphosarcoma, large kidney tumors, lymphogranuloma inguinale, and the sarcoid of Boeck, but in none of these is the globulin increased above the upper limit of normal. Not all cases of multiple myeloma, however, have hyperglobulinemia, a circumstance that makes this finding of value only when present. The second pathognomonic feature is the presence of abnormal plasma cells upon direct examination of the bone marrow. This procedure is usually and most easily accomplished by direct bone marrow puncture, using a spinal puncture needle to enter the marrow cavity for aspiration of a portion of the marrow cells. I have seen four cases of multiple myeloma in the past year in which this procedure proved the nature of the disease, when other data were not conclusive. It is probably the most reliable diagnostic procedure of all and when the technique is mastered and the results properly interpreted, this maneuver rarely fails to provide the information desired. Other features present in this case, while suggestive of multiple myeloma, are not strictly pathognomonic of this disease. For example, Bence-Jones proteinuria may occur also in carcinoma of the bone, myxedema, leucemia, etc. Additionally, multiple cystic lesions widespread in the skeletal system as visualized in this case by the X-ray do not possess features pathognomonic of multiple myeloma. In most instances, the best of X-ray interpretation often leaves one undecided between a diagnosis of this disease, widespread cancer metastases, and, especially, hyperparathyroidism. Cases of multiple myeloma have been operated not infrequently for parathyroid tumor, (recently a case by North reported in the American Journal of Surgery, March, 1936) so close is the resemblance roentgenologically in certain cases. Of differential aid in the latter circumstance, however, is the fact that while the serum calcium is always elevated in hyperparathyroidism and may be in multiple myeloma, hyperparathyroidism is almost unique in providing the combination of high serum calcium and low serum prosphorous (Albright).

In summary, this case represents a rather typical one of multiple myeloma, exhibiting all the pathognomonic features that enable one to make a definite diagnosis of this disease and most of the characteristics that would permit a presumptive one.

Dr. Reinhart:

Anatomic Diagnosis: Plasma cell type multiple myeloma involving skull, ribs, vertebrae, femur, and left axillary lymph nodes. Massive myeloma (size of a grape-fruit) extending into left thoracic cavity from ribs. Atelectasis of left lung. Kidneys of multiple myeloma. Massive uterine fibroids.

One of the most interesting of the pathological lesions associated with multiple myeloma is found in the kidneys. This lesion is characterized by a marked atrophy of the renal tubules, the tubules being packed with protein casts. The glomeruli are relatively normal. The atrophy of the tubules is apparently an atrophy of disuse induced by the tubular casts composed of Bence Jones protein obstructing the tubules. Many of these patients die in uremia as a result of renal insufficiency from this type of pathology.

Cases in which there is an involvement of the vertebrae by multiple myeloma with resultant fractures, angulation of the vertebrae, spinal cord lesions, and paralysis, usually present a marked pyuria from cystitis and pyelonephritis.

The outstanding clinical symptoms of the first recorded case of multiple myeloma were anemia, massive albumininuria, edema, and renal insufficiency. This case was described by Dr. Wm. McIntire in 1850 and seen in consultation with Drs. Watson and Bence Jones, the latter having been engaged in examining the urine of the patient. Dr. Bence Jones suggested the addition of alum to the tonics in hopes of checking the exhausting urinary excretion of animal matter.

TUBERCULOSIS ABSTRACTS

A Review for Physicians, Issued Monthly by the National Tuberculosis Association.

AMONG the large number of papers presented at the 34th Annual Meeting of the National Tuberculosis Association at Los Angeles, on June 20 to 23, were many of interest to the general practitioner.—Abstracts of some of these papers are published herewith:

From the Presidential Address: A Look Backward and Forward: J. Arthur Myers, M.D., Minneapolis, Minn.

Our methods of treatment have advanced as fast as those for diagnosis. The indications for artificial pneumothorax have extended to the minimal lesion; surgical collapse has been introduced and perfected. The importance of the reeducation and rehabilitation of recovering tuberculosis patients has been recognized and these programs are being developed everywhere. Largely as a result of the activities of the National Tuberculosis Association, mortality, morbidity, and infection attack rates have fallen spectacularly. Indeed, far more has been accomplished in the control of tuberculosis since the organization of the National Tuberculosis Association than in all the centuries of the past.

This is no time to relax our efforts; our programs must be extended and intensified. In many parts of the country more sanatoriums must be built; more general hospital beds must be made available. No community can hope to solve its tuberculosis problem until it has institutional beds available for every person who has tuberculosis in communicable form. The National Tuberculosis Association and all of its component organizations can control tuberculosis in this nation. As long as there is a single infected person in any community, a tuberculosis problem exists which must be combated.

Primary Tuberculosis Infection in Adults, Henry C. Sweany, M.D., Chicago, Ill.

The classical primary tuberculous infection based on the Parrot Cornet-Cohnheim laws and the work of Ghon, Ranke and others, has apparently been so well established that any exceptions would tend to "prove the rule" rather than invalidate the established principles.

Within these general laws, however, there are variations that occur rather consistently, forming definite types. It has been repeatedly observed and reported that aboriginal peoples produce primary lesions much like those found in infants, and as a result of this it has perhaps been prematurely concluded that primary disease is always the same, irrespective of the age or race.

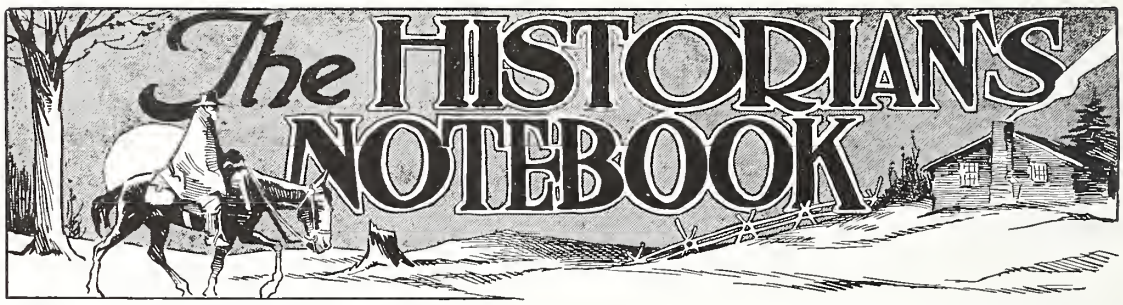
Primary infection in so-called civilized races has, perhaps, been considered similar to that in the aboriginal, but because of such a high infection rate in the past, the older age groups have all been infected before adult life, and there hasn't been sufficient opportunity to study the condition.

During the last generation, however, there has been a great change in the tuberculosis incidence over the so-called civilized world. The infection rate has gone down so much that in a great many places less than half or even a quarter of the population is infected at any one time, whereas a generation ago over three-quarters were infected by 15 years of age. In Chicago at the present, for example, the infection rate is such that about two-thirds of the population is uninfected by the time of graduation from the high school. In rural Minnesota, Iowa, and in regions of Scandinavia, it is even much lower. This changing condition is permitting more people to reach adult life without primary tuberculous infection, and as a direct corollary there are many more people receiving their primary infection in adult life. That in itself should be no mystery, but the important feature is that many of these primary infections are apparently not being recognized as such.

The most common type of these atypical forms are characterized by a small, parenchymal lesion that overflows into the surrounding tissues (perhaps by the finer bronchioles, as described by Loeschke), causing the formation of larger infiltrative masses which ulcerate into the reinfection type of disease. It is reinfection disease, but is connected by a direct chain of colonies to the first infection, and usually within a short period of time.

Another feature of this type of lesion is the small lymph node involvement. Sometimes the hilum nodes are not even reached. Perhaps contingent upon this also is the fact that primary adult infections practically never develop meningitis, as do children and almost all fatal cases in infancy.

The reasons for these variations are not yet predictable, but one factor seems to be the changing of the lymphatic anatomy as the individual advances in age. Another possibility is a nonspecific factor, or factors, due to other infections causing the generation of non-specific antibodies or agents that tend to localize the germs and prevent their spread by the lymphatics. This perhaps could be explained on the same basis as the adjuvant action of non-specific protein on immunization in tuberculosis. The facts seem to be that the more primitive the living conditions of the hosts, the more "classical" are the primary lesions in adults, and on the contrary the more centralized the population the more atypical are the "oldest" tuberculous lesions in the body.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

FORTY-EIGHT YEARS IN THE STUDY AND PRACTICE OF MEDICINE

By E. A. MURBACH, M.D., Archbold, Ohio

TO every young man during his college career comes the task of deciding definitely his aim and coveted goal after having earned his college degree.

Every young man has his hero whom he would imitate. In my case who should this hero more naturally be than my own father who had practiced medicine and surgery for more than 30 years before I was prepared to follow in his footsteps. When asked what I decided to do after I had my collegiate degree I promptly replied—"study medicine." "Then I will send you to medical college" he replied and the following fall, 1890, escorted me, with my diploma in hand, to the registrar's office where I was duly installed as a freshman at the University of Michigan.

Previous to my entry, the course had been of three years duration. At this time, however, a four-year course was being instituted and the entrants could choose either the three or four years route to the coveted degree. Naturally, the older men chose the shorter course while the younger men chose the four year program.

Of the 100 men applying for admission, 30 chose the shorter term while 70, including myself, chose the longer route and four years later received our diplomas, as the first class to have graduated after having devoted four years of study and preparation for an arduous and demanding task master—the practice of medicine.

With the inauguration of the four-year course new subjects were added and others expanded. Advanced courses in laboratory work in physiological chemistry, physiology, pharmacology and hematology, then beginning to assume importance, were added.

Thus passed the freshman and sophomore years—completing the ground work for the clinical-junior year and practical senior work. In the junior year, classes were divided into sections so that more individual and personal attention might be given to methods and means of real study of the sick which were to follow in the final years.

My Professor of Medicine, Dr. Dock, a pupil of Osler whom America claimed between the years of 1884-1905, aided greatly in changing the curriculum and developing new methods for study and care of the sick. I remember, when a new text book on medicine came out, his remark that it was Osler with a bischen Anders—Osler's work was standard, and so continued for many years.

The year following graduation in 1894, was spent as an intern in a hospital of 300 beds which was supposed to be at that time, the last word in hospital construction and completeness. It had an operating pit surrounded tier upon tier with wooden seats from which students watched the operations and listened to lectures.

There were but two interns, myself and an assistant. We gave all anesthetics, ether invariably, made daily rounds, and answered any calls or summons in the interim.

Laboratory facilities at that time were very meager. Tests, experiments and examinations were carried on in a small room previously used as a closet and store room.

Here were made urine examinations routinely. Specific gravity, reaction, the presence of albumin and sugar with a microscopic examination of sediment, obtained by use of a hand centrifuge were all felt necessary for a satisfactory aid in diagnosis.

Blood examination was limited to red and

The Author

● Dr. Murbach is a graduate of University of Michigan Medical School, 1894; member of staff at Detwiler Memorial Hospital, Wauseon, Ohio.

white count with a stained smear for microscopic examination and detection of the plasmodium malaria. What now, in contrast, provides a complete laboratory service you all know.

STUDIES IN VIENNA

After a year in practice with my preceptor and father, the urge to go to Europe, which was then much in vogue, seized me and in company with one of your famous diagnosticians, embarked from New York and landed in Southampton. After a day or two in London, we crossed the famous Channel from Newhaven to Dieppe and were soon in Paris. Spending two days in Paris we started on bicycles, which we brought with us, to Strassburg, thence through the Black Forest to Switzerland, here to visit the birthplace of my father.

After partaking of their fine wines, almost too freely, we crossed the "Boden Sea" to Friedrichshafen and rode on through Bavaria to Munich. Here encountering several Americans, students at Vienna, on a week's vacation from their studies, we were persuaded to spend the week with them and reach Vienna at the same time later in the week. You can imagine the very fine time we had listening to the fine German bands and orchestras while imbibing the delightful Hoffbrau, Pschorrbrau, and Loewenbrau brews. Art galleries, museums and sights of interest, we visited between times.

Finally reaching Vienna, we were able to arrange our courses and work in short time with the aid of our Munchener American friends whose experience enabled them to be of the greatest assistance. With our courses arranged we settled down and spent ten months in very interesting work in internal medicine with Kovacs at the Franz Joseph Spital during the entire time. There were other courses in skin, eye, gynecology and obstetrics with a laboratory course in haematology as well as practical course in autopsy and pathological diagnosis by that famous pathologist, Kolisco.

Practically all cases succumbing in the hospitals came to autopsy for confirmation of the diagnosed correctly, was sometimes diagnosed as course in obstetrics there were a total of 324 births at the "Allegemeine Kranken Haus," 25 being the record for one day.

In the horse and buggy days of 45 years ago, operations were life-saving procedures and many operations common now were seldom attempted. Even appendicitis, then rare, and frequently not diagnosed correctly was sometimes diagnosed as peri-typhlitis and the patient succumbed to the popular diagnosis of inflammation of the bowels.

GRADUATE WORK IN SURGERY

Following an urge to do surgery I spent the summer of 1905 at the university, pursuing a course in the subject and after returning all enthused, contemplated the opening of a hospital. This began with the renting of one half of a double brick structure formerly used as a school building. The other half was eventually taken over as business grew. This hospital served its purpose for many years until our present Detwiler Memorial Hospital was built.

I well remember the first operative case. The patient developed pneumonia but fortunately recovered from both the disease and the operation only to die several years later of some other unrelated disease.

In the early days it was difficult to get patients to go to the hospital and many operations had to be done in the home. Many appendix operations were done in the home, in a room stripped and scrubbed in preparation with a table improvised as an operating table by placing two of its boards lengthwise, covered by a blanket or comforter for softness and a white sheet as an emblem of cleanliness.

All the boilers and pans were pressed into service and crocks of water previously boiled were allowed to cool for making solutions, scrubbing and preparation. Bichloride towels followed with alcohol and final painting with iodine prepared the field for action. I purchased a small sterilizer which was always packed and sterilized on the kitchen range ready for any emergency. With equipment which in our modern day seems crude, many cases recovered with a mortality rate comparable to that with all our modern methods and refinements.

My wife, fortunately, being a nurse, was an enthusiastic assistant and at the same time a balance wheel.

My first appendicitis patient nearly 40 years ago is still living and hearty, in spite of the prophecy of knowing ones that seven years was the limit of his existence. Not having any operating gowns, my assistant, Dr. Fauster, Sr., and I borrowed the bar aprons of a friendly Swiss saloon keeper. Rolling up our sleeves and donning our gowns we operated and found a well of walled off pus but never did find or especially

The Committee on Medical History and Archives of the Ohio State Archaeological and Historical Society will welcome anything relating to the practice of medicine, including dentistry, pharmacy, nursing and like activities, books, reprints, transactions, instruments, prescriptions, account books, saddle bags, instrument cases, diplomas, letters, d.aries, genealogies and photographs.

Contributions should be sent to Jonathan Forman, M.D., chairman of the Committee, care of the Ohio State Archaeological and Historical Society, Museum, Ohio State University Campus, North High St., Columbus, Ohio. Such contributions will be properly and permanently preserved in the Museum of the Society.

look for the appendix. Fortunately the discharge became less and less. The sinus finally healed as most such tracts do.

Later I encountered a similar case in a man whose leg I had held for my father to amputate 30 years previously following a crushing injury under a freight car he was attempting to ride. This appendiceal sinus eventually healed but slowly. During the healing period and when the incision was all but closed, I took my brother, then home from medical school, to observe this case and assured him the incision would heal completely, as it did. As it happened, when he returned to his studies he was given a question in an examination concerning the procedure in such a case, and of course had visible proof of the correctness of his answer. Within the past year, this same patient succumbed, at the age of 70 years, to arterio-sclerotic disease with its cardio-renal symptom complex. He had been treated under modern method by my son, now following in my footsteps, and the third generation to treat this same patient.

AT MAYO CLINIC

In 1909 with enthusiasm at its height, I spent a very profitable week at the already famous Mayo Clinic and while there became a life member of the Surgeons' Club. This group, composed of visiting physicians and surgeons from the four corners of the earth, organized anew each Monday afternoon after the members had experienced their first morning at the clinic. Following an address by some member of the staff an hour or two was spent in interesting discussion of the morning's work. The week was very profitable and all too short. The elder Mayo, father of William and Charles, and founder of the original clinic, was then living and still very active. He occasionally attended the session of the Club.

THE LONDON CLINIC

In July, 1914, the Clinical Congress of Surgeons met in London and I made preparations to attend. By way of Montreal, out the St. Lawrence with a short stop at Quebec, I arrived at Glasgow eight days later. From there I made a trip through the Trossachs, the Scotch lakes and mountains by coach and boat, through scenes and places made famous by Sir Walter Scott in his writings and then went on to Edinburgh. A few days here amidst scenes of beauty and romance closely connected with the tragic life of Mary, Queen of the Scots, the trip was resumed, and by way of Leeds with a few hours at the hospital where Moynihan was working, I finally reached London, here to spend the week attending clinics, medical and surgical meetings. I was comfortably settled in a hotel near Westminster Abbey.

Soon after I was situated there, war was declared on August second and men began scattering here and there. With Bank holidays Saturdays and Sundays succeeding each other, I became suspicious as to what might happen and at once checked out of the hotel, paying my bill with a $50.00 American Express Check and received a fairly large amount of gold in change. This I immediately chucked into my hip pocket, sterilizing it for future needs and emergencies. Within an hour I reengaged my room and checked out two succeeding mornings, adding to my hip pocket whatever gold I could get them to give me. The third time I checked out for good and left for Edinburgh. Here I pursued for two weeks, an expected course of a month, at the Royal Infirmary.

Then came the call to Scotland to prepare for war. Surgeons who were called, sensed the seriousness of it all and when asked how long the war would last answered, "at least two years." They knew not how many more. Hospitals were emptied as fast as possible and surgeons and physicians rushed with their units in preparation for service across the Channel.

By this time every one became anxious to return to the United States, and a mad scramble for passage on different boats ensued. Many of the finer boats were stripped and converted into transports for troops to France.

At Liverpool we waited over night for steerage passage on the old Campania, after having had a half dozen cancellations in a week's time. Accommodations were poor and the fare as bad or worse. However, the usual class of passengers traveling steerage were engaged in the service and unable to travel except where military orders sent them. We saw thousands of young men in high glee embarking amongst the first contingents, most of whom were swallowed up in the first mad rush of the great conflagration never to return. Finally reaching New York after a trip with windows curtained and lights out at night, we were soon able to regain the fifteen pounds lost during ten days travel, not from Mal de Mer, but because of the poor quality of food.

MEDICAL LEGISLATION

A half century ago the law permitted almost any one to practice medicine, there being almost complete absence of legal control over qualifications. In February, 1896, the Ohio Legislature passed a law regulating the practice and setting up standards of qualifications. My father having graduated 30 years prior to receiving of my diploma, we both received our licenses from the State of Ohio in May of that same year. Thanks largely to organized medicine, every state now requires registration with qualifications assuring medical service equal to any in the world.

The period from 1890 to the present has seen greater strides in medical science than in all its previous history. "The past is always with us

and alone is enduring" said Osler. With changes succeeding one another in endless rapidity with one likely to live too much for the present and too much in the future, it might be well to recall the days of old and gratefully acknowledge names and deeds of our forebears whose labors in the past have made the present possible. In recalling medical advances and discoveries, one must always be mindful of the fact that every step in advance, was dependent upon and owed something to the efforts of previous workers. The decisive discovery depends usually upon preliminary contributions and efforts of preceding investigators with the brilliant contribution being merely the pinnacle of a gradually developing pyramid of knowledge and research.

Wilhelm Conrad Roentgen in 1895 gave to the world the X-ray. This proved to be one of the greatest developments in the history of medicine. What it has done since that time in aiding diagnosis and combating diseased conditions is familiar to you all. In the enthusiasm of its early days, a classmate and a very dear friend took up X-ray work. With the meager knowledge then of its power for harm, he sacrificed successively a finger, a hand, an arm and finally his life. With realization of its power, its perfection and safeguarding, little is now thought of the terrible consequences and sacrifices of its early workers.

Madam Curie having received her science degree from the University of Paris in 1896, began her research into radioactivity and in 1898 obtained radium from pitch blend, thus giving the world one of the greatest means of combating cancer.

NOBEL PRIZE

When Alfred Bernard Nobel, manufacturer of dynamite, inventor of smokeless powder and artificial rubber, died in 1896, he bequeathed the sum of nine million dollars as prizes for outstanding accomplishments in physics, chemistry, medicine, literature and the promotion of peace. The prize is a means of giving to medical men who have aided civilization by their accomplishments, a small amount of cash and a great deal of publicity. Medical scientists seldom work with thought of recompense but have given freely of their work for the benefit of all mankind. The debt of modern civilization to scientific medicine can never be fully paid. In 1901—the prize went to Von Behring who had developed the anti-toxin for diphtheria.

I well remember the disease before the days of antitoxin when I used to witness kiddies with membranous croup, walk into father's office to have their throats painted with a camel's hair brush and pure tincture of ferric chloride. The same brush was dipped into the same bottle of solution for one case after another. Some recovered in spite of what was then orthodox treatment; others died in 24 to 48 hours overwhelmed by the toxin of the diphtheria bacillus. I well remember three and four children in a family succumbing.

It was my privilege while in Vienna to witness the preparation of antitoxin as it was just being developed. A classmate of mine, who went from Dr. Vaughn's research and bacteriological laboratory to Parke, Davis in Detroit, was sent by them to visit Vienna and secure first hand knowledge of antitoxin, its working and production. Because he could speak no German, he persuaded me without any urging, to accompany him and act as his interpreter. While doing him a good turn, I myself was rewarded and deeply impressed by what I saw and by the results accomplished. Several days thus profitably spent, he left for the U.S.A. and Detroit to establish for his firm a reproduction of what he had seen in Vienna.

When I returned home to resume practice with my father, one of my early cases was a call to see a young boy with a sore throat. Diagnosing it without any trouble as diphtheria, I returned to the office to procure some antitoxin which I had brought with me. I asked father to accompany me and witness its administration, probably the first given in northwestern Ohio and I am sure the first in our county. We examined the youngster and I noticed a doubtful shake of the paternal head and on the way back he said, "Aren't you going to paint his throat", and I said "decidedly not." "Well", he replied, "I never saw a throat like that and had the patient get well. He will die surely." I said, "No, he will get well." Imagine his surprise when I had him accompany me later to see the dirty gray membrane turning up its edges and losing its angry appearance. With another dose of antitoxin in a few days, the boy was on his way to recovery.

In 1902, the Nobel Prize went to Sir Ronald Ross for his discovery that the anophele mosquito spread malaria, along with method for the destruction of the mosquitoes. As a result, malaria has been eliminated from the most of the civilized world. The northwest Ohio area, 50 years ago with its swamps and poor drainage, was a hot bed of malaria. I still remember when ten years old lying behind the old base burner, teeth chattering, trying to keep warm and dosed with quinine powders, for then we had neither tablets or capsules to disguise its terrible taste.

In 1909, Theodore Kocher received the Nobel Prize. He was the first surgeon to be thus rewarded. He originated the epoch making operation for removal of the thyroid gland. On May 28, 1910, Robert Koch died of heart disease. He had established the four postulates as a sound procedure in proof that a specific germ is connected with a particular disease. Because of this man, imbued with a rigorous scientific spirit, tuberculosis is today considered a distinctly pre-

ventable and curable disease. His work with anthrax bacillus and his recovery of the tubercle bacillus, the bacilli of Rinderpest and Asiatic cholera together with the influence of his scientific labors on other remarkable achievements place him high amongst the Immortals. In 1905, he was awarded the Nobel prize.

1912 saw the passing of Lister.

The results of Pasteur's work on putrefaction gave the ground work for modern bacteriology and to Lister gave the answer to the problems that had puzzled him. Thus he discovered the paramount importance of microbic action and its direct application to surgery, enabling him to establish antiseptic principles in operations and the treatment of infections.

The pale parasite of syphilis lay hidden for centuries until Fritz Schaudin, an inn-keeper's son, exposed this terrible affliction of mankind, when in 1905 he clearly isolated the spirochete of syphilis and demonstrated beyond doubt that it was its cause. In 1907 came the announcement of the diagnostic blood reaction since known as the Wassermann test. Culminating these discoveries of previous years was the discovery by Ehrlich of arsephenamine. These discoveries have provided methods of ready recognition of the disease and a knowledge of the mechanism of infectousness and its prompt control completely lacking only 30 or 40 years ago. The driving of this disease into the open leads to the hope that some day it may follow typhoid, malaria, diphtheria and smallpox and become as rare.

Forty-five and fifty years ago typhoid was always with us. In the days before I began practice, father had from 20 to 30 cases most of the time and because of the slowness of transportation and the rough and rugged roads to travel, he would go one direction one day seeing all cases in that direction, getting home probably by night and then starting out the next morning in the opposite direction to see the cases it had been impossible to get to before. Office hours were few and irregular and you had to consult the doctor when or where you could find him.

The progress in prevention of this disease needs only a comparison with the cases in the Spanish-American war in camps like Chickamauga Park which was used in both wars for concentration and training of troops. Improved sanitation, a non-polluted water supply, and the elimination of flies and mosquitoes have made both typhoid and malaria rare diseases today.

We of this day and age who have automobiles and good highways have no idea what experiences the early country doctors had to undergo and endure. They worked day and night and died in the harness, so to speak. Often when I think I am having a hard time I like to sit down and read Ian Maclaren's "Doctor of the Old School."

YELLOW FEVER

The French spent 250 millions on expensive machinery and labor when, the successful digger of the Suez Canal, Ferdinand DeLesseps started to part the continents in Panama in 1880; 20,000 deaths from yellow fever and other tropical handicaps forced the junking of the work with machinery in the jungle in 1889.

In 1904 Theodore Roosevelt interested the United States in the purchase of the French rights to the territory—the disease-infested "mosquito roost". Then Gorgas and his co-workers transformed it into a veritable summer resort. Thus, with the passage of the first boat, in August, 1914, an outstanding event was accomplished through medicine.

The life and work of Gorgas in the elimination of yellow fever and malaria through the destruction of the offending mosquitoes is now medical history and familiar to you all.

Thirty years ago summer was considered the dangerous period of the year for infants, and the second year was considered the critical period in childhood because of the great danger from intestinal upsets with accompanying cholera morbus, cholera infantum which so often had fatal results. Of these diseases we now hear little. Scientific care of the expectant mother and of the infant, safe water and safe milk and protection against contagious diseases have contributed much to safe birth and low infant mortality. We now fear winter more than summer because of its colds, measles, scarlet fever and pneumonia. Smallpox and diphtheria, both positively preventable, have lost their terror.

VITAMINS

In 1912, investigators confirmed the earlier work of Lunin, a pupil of Bunge at Basle and postulated vitamin deficiencies as cause of disease and opened the door to the understanding of some of man's oldest diseases, scurvy, beriberi, etc. After the usual quibbling, stirred up by the introduction of revolutionary thought, progress toward understanding of vitamins and their role in health proceeded apace and today, known vitamin-deficiency diseases are controlled easily and effectively.

DIABETES

In 1922 came insulin, when Banting and Best were able to prove by experiments on dogs that this product of the pancreas when injected into a diabetic person would allow him to live like a normal man. The most dramatic results of its use are shown among children whose chances of living more than a year or two, at most previous to its discovery and use, were slim indeed. Today few die, if properly treated and controlled by diet, exercise and insulin. Even now improvements in the use of insulin have been made and with work continually being done what the future will bring

forth can only be conjectured. In 1923, Banting and McCloud received the Nobel Prize for their outstanding work in the development of insulin.

In 1924, William Einthoven, a Dutch physician, by his work on the heart and a study of the electric currents developed by its beats, made possible the development of the electro-cardiograph.

Years ago we treated mitral and aortic insufficiencies and stenoses as distinctive diseases. Today with advances beginning with Mackenzies' conception of the functional capacity of the heart and the emphasis placed by Cabot in 1914 on etiology, we consider the valvular defects as symptoms and manifestations of muscular and vascular pathology. Coronary thrombosis, coronary occlusion and cardiac infarction, the details of which were worked out chiefly by American physicians, was recognized and confirmed by autopsy as early as 1896 by Dr. Dock. In 1912, Herrick established these conditions as clinical entities.

In 1930, the Nobel prize was awarded to Karl Landsteiner for his work on the blood which led to the practical use of blood transfusion.

In 1934, through Minot, Murphy and Whipple, the prize again came to the United States for their monumental work in the development of a method of control of pernicious anemia by the use of liver.

Today research as carried out in this country leads all the world. American initiative together with American opportunity are winning recognition for superlative achievements in science and medicine. The surgical treatment of tuberculosis, which had its origin in the chest surgery of the World War, received great impetus during 1925 with introduction of the principles of rest by means of pneumothorax, phrenicectomy and thorocoplasty.

Many other advances in general and conservative surgery owe much to the World War and its surgeons. No profession sacrificed more, or gave up more, willingly, practice at home than did the medical profession during the World War, which was to have made the world safe for Democracy.

After serving on the draft board as examining surgeon I spent August, 1918 to January, 1919, in the service with the remote hope of again crossing the ocean to see the end of the war with which I had so close contact in its beginning two years previous. Fate, however, decreed I was to remain and do my part on this side. My brother, who enlisted with the first call, was amongst the first contingent sent to France. He was assigned to the Rainbow Division as soon as they came over and saw real service for two years.

Because of the wonderful response of the medical profession to the call, there was a dearth of physicians at home and those left were heavily overworked. To ease my conscience I engaged a middle-aged man to take my place while away. He had been turned down for service. He came, took over my work and the next day I departed for camp. When I returned, he had two or three patients left of what I thought was a pretty good practice. He had turned out to be a morphine addict. The only good he did was to give to the community an appreciation of the medical care and service which they had been used to and had taken as a matter of course.

I wonder, in the event of another war, if the medical profession and citizenry at large would be as enthusiastic to enter it as they were in 1918. Wars still continue and threaten in spite of our efforts to end future wars.

It seems that during the revolutionary changes through which our country, in common with the world at large, has been passing during the past seven or eight years, that medicine has more to be proud of, and less to apologize for, than any other profession or occupation in the world. Government encroachment on private medicine continues unabated. Seeing one branch of practice after another engulfed in the oncoming glacier, one might well pause and ask where public health ends and private practice begins. No one disparages the value of public health service. It fills a particular need and in certain fields has done notable work. Unless there are some limits to its activities, however, medicine may well become entirely a government concern. There is much talk of state control of medicine and with Bolshevism, Facism, and Nazism to say nothing of New Dealism with its bureaucratic tendencies, the time may come when legislation, politics, and state control will substitute an organized social program for the human bond that has always existed between the doctor and his patients.

The American Medical Association is at present engaged in a comprehensive study of the demand for and supply of medical service. In accordance with its ideal of maintaining a high quality of medical service, it is, and should be, the aim of the medical profession to continue to oppose every plan that would lessen the value of that service. Every effort to substitute unqualified lay or political management for qualified professional control, to take away the right of the patient to choose his own physician to mechanize, standardize, or regiment medical service and thereby destroy its quality and load the cost of medical care with the expense of a meddling, political bureaucracy, must be opposed and met with plans by the profession itself. To you of the younger generation we who are passing on, ask, as did Col. John McCrea, a Canadian medical officer in 1915, On Flanders field to

> Take up our quarrel with the foe;
> To you from failing hand, we throw
> The torch; be yours to hold it high
> If ye break faith with us who die
> We shall not sleep, though poppies grow
> In Flanders field.

MEDICAL PROFESSION DRAFTS CONSTRUCTIVE PROGRAM TO MEET HEALTH NEEDS OF NATION; BASIC PRINCIPLES ADOPTED AT SPECIAL SESSION OF HOUSE OF DELEGATES OF A.M.A.

A PROGRAM designed to correct deficiencies in the nation's health services, to provide a better distribution of medical services, and to establish methods of assisting certain groups of people to finance the costs of medical care, was adopted by the House of Delegates of the American Medical Association, convening in special session in Chicago, September 16 and 17, 1938.

Called for the purpose of considering proposals formulated by the Interdepartmental Committee to Coordinate Health and Welfare Activities of the Federal Government appointed by the President of the United States and which were discussed at the National Health Conference in Washington last July, the House of Delegates of the A.M.A. took definite and decisive action on the various sections of the Interdepartmental Committee's proposed program.

This action resulted in the formation of a constructive program in which were incorporated certain recommendations of the Interdepartmental Committee report and additional recommendations made by individual members and groups of members of the medical profession of the country, each recommendation being in line with sound scientific, economic and ethical principles which will insure no deterioration of the quality of health services and medical care.

Boiled down, the program approved contained these salient recommendations:

1. Establishment of a Federal Department of Health with a doctor of medicine as secretary and who shall be a member of the President's cabinet.

2. Expansion of public health and maternal and child health services of the Federal Government under provisions which would leave actual administration and control of activities in the hands of state and local authorities, permit the Federal Government to provide financial aid and technical advisory services, and exclude expenditures for treatment of disease except in so far as this cannot be successfully accomplished through the private practitioner of medicine.

3. Expansion of general hospital facilities where need exists. Make existing hospital facilities more readily available. Improvement of the stability and efficiency of existing church and voluntary hospitals by payment to them of the costs of necessary hospitalization of the medically indigent.

4. Medical care of the indigent should be organized by local government units and supported by tax funds. Poorer communities should receive state aid for medical care of the indigent. The Federal Government should aid financially when the state is unable to meet emergencies.

5. Continuation of methods and practices which have insured good quality of medical care among all classes of people.

6. Coordinated program for improvement of food, housing and other environmental conditions which have the greatest influence on the health of the people. Educational program to inform all people how to take advantage of present medical services available.

7. Use of public funds to provide medical care for the medically needy providing public welfare administrative procedures are simplified and coordinated;

the provision of medical services is arranged by responsible local public officials in cooperation with local medical profession and its allied groups; and the Federal Government assumes only the role of giving financial and technical aid to the states in the development of sound programs through procedures largely of their own choice.

8. Expansion of the principle of hospital service insurance or group hospitalization as a community project with services of such agencies confined solely to hospital facilities.

9. Development of cash indemnity insurance plans to cover, in whole or in part, the cost of emergency or prolonged illness, providing such agencies comply with state statutes and regulations to insure their soundness and financial responsibility and have the approval of state and county medical societies in localities in which they operate.

10. Expansion of workmen's compensation laws to provide for meeting the costs of illness sustained as a result of employment in industry.

11. Compensation for loss of wages during sickness. Attending physician should be relieved of the duty of certification of illness and of recovery, such function to be performed by qualified medical employee of the disbursing agency.

12. Unqualified opposition to any system of compulsory health insurance.

Complete text of the final action of the House of Delegates is appended. The full proceedings of the meeting were published in *The Journal of the American Medical Association* of September 24.

Ohio was represented by its quota of seven delegates, namely: Dr. Ben R. McClellan, Xenia; Dr. C. W. Waggoner, Toledo; Dr. C. E. Kiely, Cincinnati; Dr. E. R. Brush, Zanesville; Dr. Carl R. Steinke, Akron; Dr. John B. Alcorn, Columbus, alternate for Dr. C. W. Stone, Cleveland; and Dr. William M. Skipp, Youngstown, alternate for Dr. G. F. Zinninger, Canton.

Dr. Clyde L. Cummer, Cleveland, served as representative from the Section on Dermatology and Syphilology.

Dr. McClellan was a member of the reference committee which considered the public health sections of the Interdepartmental Committee's report. Of the 175 members of the House of Delegates, 164 attended the two-day session.

In reading the following complete report of the reference committee which was adopted by the House of Delegates and from which the above "boil-downs" were taken, readers should refer to the summary of the report and recommendations of the Interdepartmental Committee serving for the President of the United States, published in the September, 1938, issue of *The Ohio State Medical Journal*, pages 1031-1035:

REPORT WHICH WAS ADOPTED

"Since it is evident that the physicians of this nation, as represented by the members of this House of Delegates convened in Special Session, favor definite and decisive action now, your Committee submits the following for your approval:

Recommendation I

"1. The establishment of a Federal Department of Health with a Secretary who shall be a doctor of medicine and a member of the President's cabinet.

"2. The general principles outlined by the Technical Committee for the expansion of Public Health and Maternal and Child Health Services are approved and the American Medical Association definitely seeks to cooperate in developing efficient and economical ways and means of putting into effect this recommendation.

"Any expenditure made for the expansion of public health and maternal and child health services should not include the treatment of disease except in so far as this cannot be successfully accomplished through the private practitioner.

Recommendation II

"We favor the expansion of general hospital facilities where need exists. The hospital situation would indicate that there is at present greater need for the use of existing hospital facilities than for additional hospitals.

"We heartily recommend the approval of the recommendation of the Technical Committee stressing the use of existing hospital facilities. The stability and efficiency of many existing church and voluntary organizations could be assured by payment to them of costs of the necessary hospitalization of the medically indigent.

Recommendation III

"We advocate recognition of the principle that the complete medical care of the indigent is a responsibility of the community, the medical and

allied professions, and that such care should be organized by local government units and supported by tax funds.

"Since the indigent now constitute a large group in the population, we recognize that the necessity for state aid for medical care may arise in poorer communities and the federal government may need to provide funds when the state is unable to meet these emergencies.

"Reports of the Bureau of Census, the U. S. Public Health Service, and of life insurance companies show that great progress has been made in the United States in the reduction of morbidity and mortality among all classes of people. This reflects the good quality of medical care now provided. We wish to see continued and improved, the methods and practices which have brought us to this present high plane.

"We wish to see established well coordinated programs in the various states in the nation, for improvement of food, housing, and the other environmental conditions which have the greatest influence on the health of our citizens. We wish also to see established a definite and far reaching public health program for the education and information of all the people in order that they may take advantage of the present medical service available in this country.

"In the face of the vanishing support of philanthropy, the medical profession as a whole will welcome the appropriation of funds to provide medical care for the medically needy, providing first, that the public welfare administrative procedures are simplified and coordinated; and second, that the provision of medical services is arranged by responsible local public officials in cooperation with the local medical profession and its allied groups.

"We feel that in each state a system should be developed to meet the recommendation of the National Health Conference in conformity with its suggestion that 'The role of the federal government should be principally that of giving financial and technical aid to the states in their development of sound programs through procedure largely of their own choice'.

Recommendation IV

"We approve the principle of hospital service insurance which is being widely adopted throughout the country. It is capable of great expansion along sound lines, and we particularly recommend it as a community project. Experience in the operation of hospital service insurance or group hospitalization plans has demonstrated that these plans should confine themselves to provision of hospital facilities and should not include any type of medical care.

"We recognize that health needs and means to supply such needs vary throughout the United States. Studies indicate that health needs are not identical in different localities but that they usually depend on local conditions and therefore are primarily local problems. We therefore encourage county or district medical societies, with the approval of the state medical society of which each is a component part, to develop appropriate means to meet their local requirements.

"In addition to insurance for hospitalization we believe it is practicable to develop cash indemnity insurance plans to cover, in whole or in part, the costs of emergency or prolonged illness provided they have the approval of county and state medical societies in localities in which they operate. Agencies set up to provide such insurance should comply with state statutes and regulations to insure their soundness and financial responsibility.

"We are not willing to foster any system of

LIAISON COMMITTEE NAMED TO CONFER WITH FEDERAL OFFICIALS

By action of the House of Delegates of the A.M.A., at its special session in Chicago, the Speaker of the House, Dr. H. H. Shoulders, was instructed to appoint a committee of not more than seven practicing physicians to present the program adopted by the House of Delegates to the Interdepartmental Committee and other Federal officials, and to serve as a liaison between the American Medical Association and government and lay groups at subsequent conferences on medical and health matters.

The Speaker appointed as members of the liaison committee: Dr. Irvin Abell, Louisville, President, American Medical Association, chairman; Dr. Walter F. Donaldson, Pittsburgh, Dr. Frederic E. Sondern, New York City, Dr. Walter E. Vest, Huntington, West Virginia, Dr. Fred W. Rankin, Lexington, Kentucky, Dr. H. A. Luce, Detroit, and Dr. E. H. Cary, Dallas, Texas.

Drs. Donaldson, Sondern, Vest, Rankin and Luce composed the reference committee which drafted the final report and program which were adopted by the House of Delegates.

compulsory health insurance. We are convinced that it is a complicated, bureaucratic system which has no place in a democratic state. It would undoubtedly set up a far reaching tax system with great increase in the cost of government. That it would lend itself to political control and manipulation there is no doubt.

"We recognize the soundness of the principles of workmen's compensation laws and recommend the expansion of such legislation to provide for meeting the costs of illness sustained as a result of employment in industry.

"We repeat our conviction that voluntary indemnity insurance may assist many income groups to finance their sickness costs without subsidy. Further development of group hospitalization and establishment of insurance plans on the indemnity principle to cover the cost of illness will assist in solution of these problems.

Recommendation V

"In essence the recommendation deals with compensation of loss of wages during sickness. We unreservedly endorse this principle as it has distinct influence toward recovery and tends to reduce permanent disability. It is, however, in the interest of good medical care that the attending physician be relieved of the duty of certification of illness and of recovery, which function should be performed by a qualified medical employee of the disbursing agency."

A.M.A. Radio Program Starts Oct. 19

The fourth series of programs broadcast in dramatic form portraying fictitious but typical incidents of significance in relation to health, by the American Medical Association and the National Broadcasting Company entitled "Your Health", will begin Wednesday, October 19, and run consecutively for 36 weeks. The program will be given over the Blue network of the N.B.C. each Wednesday afternoon at 2:00 o'clock, eastern standard time.

Broadcast on what is known in radio as a sustaining basis, time for this program is furnished gratis by the radio network and local stations, and no revenue is derived from it. Therefore, local stations may or may not take the program, at their discretion, except those stations which are owned and operated by the National Broadcasting Company.

The programs to be broadcast in the first group, together with dates and topics, are as follows:

October 19	What is Health.
October 26	Growing Strong.
November 2	Seeing and Hearing Well.
November 19	Healthier Boys and Girls.

Of the 30 stations connected with the Blue network of the National Broadcasting Company, the following are located in Ohio: WHK, Cleveland; WSPD, Toledo; WLW, WCKY, and WSAI, Cincinnati. Supplementary facilities of the Blue Network are available to 50 more stations, including WCOL, Columbus.

No assurance can be given as to how many of these stations will broadcast the program "Your Health". It is suggested that local medical societies in the cities where the stations are located use their influence with station managements to have the programs presented.

"MEDICALLY INDIGENT" IS DEFINED BY HOUSE OF DELEGATES

The following definition of a "medically indigent" was discussed by the House of Delegates of the American Medical Association at its special session in Chicago, September 16 and 17, 1938. Although not officially adopted, the definition appeared to have coincided with the views expressed by many delegates in discussions on the floor and in resolutions:

"A person is medically indigent when he is unable in the place in which he resides, through his own resources, to provide himself and his dependents with proper medical, dental, nursing, hospital and pharmaceutical care and therapeutic appliances without depriving himself or his dependents of necessary food, clothing, shelter and similar necessities of life, as determined by the local authority charged with the duty of dispensing relief for the medically indigent."

Beware of Fake Book Agent

Physicians should have no dealings with a man giving the name, John Hamilton, claiming to represent a firm known as The Professional Circulation Company, Inc., 120 West Forty-Second Street, New York City, and representing himself and his firm as authorized to take subscriptions for books published by the W. B. Saunders Company.

This so-called agent has been operating in Dayton. Investigation by the Montgomery County Medical Society revealed that the W. B. Saunders Company knows nothing of such a man and that apparently there is no Professional Circulation Company, Inc.

FIRST SESSIONS OF POSTGRADUATE LECTURES IN REGIONS C, D, and E WELL-ATTENDED; FUTURE PROGRAMS REVIEWED

THREE hundred and fifty physicians attended the opening session of the first course of the Ohio State Medical Association Regional Postgraduate Lectures held at Mansfield and Dayton, Wednesday evening, September 7, and at Zanesville, Thursday evening, September 8.

Heeding the advice of the Committee on Education and the Sub-Committee on Postgraduate Lectures, speakers at the initial meetings made their talks practical, stressing diagnosis and treatment. At each of the sessions, interesting "question and answer" periods, followed the addresses.

THE MANSFIELD SESSION

Dr. Charles G. Brown, Mansfield, presided at the session held at the Mansfield-Leland Hotel. A short introductory talk was made by Dr. Barney J. Hein, Toledo, President of the State Association, in which he explained the purposes of this five-year educational project for the benefit of the members of the Association. Speakers at this meeting were: Dr. Roy W. Scott, "Clinical Aspects of Arteriosclerosis", and Dr. Clyde L. Cummer, Cleveland, "Treatment of Early Syphilis".

Those who registered, numbering 130, were:

THOSE WHO ATTENDED

R. P. Bogniard, E. L. Clem, P. E. Decatur, G. Delsher Fridline, Paul E. Kellogg, C. B. Meuser, C. C. Patton, L. G. Sheets, Ashland; P. A. Blackstone, Bellville; D. G. Arnold, J. R. Beck, D. D. Bibler, W. G. Carlisle, F. W. Kehrer, C. H. King, W. L. Yeomans, Bucyrus; M. F. Axthelm, Caledonia; Frank M. Hartsook, E. C. Sherman, Cardington; J. A. Agnew, E. C. Brandt, C. A. Marquart, Crestline; Dr. Mouser, Delaware.

R. J. Emslie, W. B. Hubbell, A. S. McKitrick, Geo. D. Nicholas, Elyria; Ernest V. Ackerman, W. H. Eastman, R. S. Lord, Fredericktown; C. Adams, Charles J. Griebling, Mart L. Helfrich, O. R. Kackley, John M. Kidd, Galion; L. H. Hayhurst, Greenwich; F. E. Reed, Huron; M. C. Oakes, Lexington; C. E. Whitacre, J. G. Whitacre, Lodi; I. Leonard Levin, Lorain; G. B. Fuller, R. C. Paisley, Loudonville.

W. D. Abrams, L. Adams, P.M.A. Bein, C.H. Bell, A. C. Biddle, R. R. Black, L. D. Bonar, Chas. Brown, R. D. Campbell, Roy I. Curry, C. R. Damron, D. Dalton Deeds, Mabel Emery, G. L. Evans, Burr M. Hathaway, F. J. Heringhaus, C. E. Hunter, C. R. Keller, D. C. Lavender, F. Maxwell, Howard Peck, W. W. Peirce, Roy C. Rehder, O. H. Schettler, S. C. Schiller, C. L. Shafer, L. A. Smith, W. A. Smith, J. L. Stevens, P. A. Stoodt, D. R. Talbot, F. M. Wadsworth, D. A. Weir, Hugh Winbigler, W. E. Wygant, J. A. Yoder, Mansfield.

C. J. Altmaier, C. L. Baker, E. L. Brady, J. H. Jackson, H. K. Mouser, C. G. Smith, Jack F. Smyth, Marion; Morris Wilderom, Medina; A. T. Cole, J. C. Elder, Luther W. High, Millersburg; Samuel L. Weir, P. S. Whiteleather, Minerva; T. Caris, Joseph P. Ingmire, Frank H. Sweeney, Mt. Gilead; J. L. Baube, Robert L. Eastman, James F. Lee, I. S. Workman, Mt. Vernon; H. Erlenbach, Earl Roasberry, T. H. Smith, New London; W. W. Lawrence, O. J. Nicholson, R. P. Scott, Norwalk.

F. R. Dew, V. C. Hart, L. H. Trufant, Oberlin; Geo. H. Irvin, O. P. Ulrich, Orrville; M. E. Stillwell, Rittman; E. J. Meckstroth, H. L. Sowash, G. A. Stimson, Sandusky; W. V. Banning, J. H. Boutwell, Shreve; B. J. Hein, Toledo; Emil J. Heinig, Lee Shimansky, Vermilion; N. J. M. Klotz, H. T. Pease, Wadsworth; B. D. Osborn, Waldo; R. W. Faus, William Klann, Wellington; L. E. Cullum, West Salem; J. J. Kinney, L. G. Strauss, Wooster.

At the meeting in Mansfield, September 21, Dr. Gerald S. Shibley, Cleveland, discussed "Pneumonia", and Dr. Thomas P. Sharkey spoke on "Diabetes".

BALANCE OF PROGRAM

All meetings in Mansfield are to be held in the Mansfield-Leland Hotel. The program for the remainder of the course follows:

October 5—"Intestinal Obstruction", by Dr. Louis Feid, Jr., Cincinnati; "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by Dr. Edwin J. Stedem, Columbus.

October 19—"Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. A. Graeme Mitchell, Cincinnati; "Tuberculosis in Infancy", by Dr. Waldo E. Nelson, Cincinnati.

November 2—"Common Psychoses", by Dr. J. F. Bateman, Columbus; "Cancer of the Breast", by Dr. E. J. McCormick, Toledo.

November 16—"Prenatal and Postnatal Care", by Dr. James M. Pierce, Cincinnati; "Infections of the Urinary Tract", by Dr. John S. Lewis, Jr., Youngstown.

November 30—"Angina Pectoris and Coronary Thrombosis", by Dr. George I. Nelson, Columbus; "Fungous Infections of the Skin", by Dr. Charles J. Shepard, Columbus.

December 15—"Arthritis: Medical Aspects", Dr. Russell L. Haden, Cleveland; "Arthritis: Orthopedic Aspects", by Dr. J. I. Kendrick, Cleveland.

SESSION AT DAYTON

At the opening of the course in Dayton, in the Fidelity-Medical Building, September 7, Dr. Parke G. Smith, President-Elect of the State Association, urged the 120 physicians present to stimulate interest in the lecture series in the

various counties in the region. He also commented briefly on the plans of the Ohio State Medical Association and the American Medical Association in meeting the problems made acute by the National Health Conference. Dr. E. L. Braunlin, Dayton, president of the Montgomery County Medical Society, presided at the meeting. The speakers were: Dr. Frank C. Clifford, Toledo, "Angina Pectoris and Coronary Thrombosis", and Dr. John E. Rauschkolb, Cleveland, "Treatment of Early Syphilis".

Meetings in the Southwestern Ohio region will be alternated between Dayton and Springfield, on Wednesday evenings, two weeks apart. The second session was held at the Shawnee Hotel, Springfield, September 21, with Dr. C. E. M. Finney, president of the Clark County Medical Society, presiding. Lecturers were: Dr. M. A. Blankenhorn, Cincinnati, "Pneumonia", and Dr. C. D. Christie, Cleveland, "Diabetes".

Those who attended the meeting at Dayton, September 7, were:

AMONG THOSE REGISTERED

C. J. Bondley, Belle Center; O. C. Amstutz, F. B. Kaylor, F. W. Kaylor, Bellefontaine; E. J. Marsh, Broadway; Donald F. Kyle, Cedarville; C. D. Slagle, Centerville; Parke G. Smith, Cincinnati; H. W. Kendell, Covington.

Sterling H. Ashmun, J. A. Baird, A. L. Biggs, E. E. Bohlender, A. T. Bowers, E. L. Braunlin, A. B. Brower, Wm. B. Bryant, A. D. Cook, F. D. Crowl, W. E. Dapp, T. H. Dickinson, Ralph Dean Dooley, A. G. Farmer, Robert H. Firth, George D. Gohn, R. L. Haas, L. M. Hohman, E. M. Huston, T. K. Kirk, M. M. Linder, Elmer C. Loomis, S. N. Maimon, R. C. Markey, J. Grant Marthens, Lillian McBride, A. P. McDonald, T. E. Newell, B. Andrew Rose, James Sagebiel, M. M. Shafer, Ned Shepard, W. L. Slagle, B. C. Stuhlman, R. E. Tyvand, Walter W. Webb, Giles Wolverton, E. A. Zimmermann, Dayton.

Bryon B. Blank, DeGraff; C. E. Newbold, C. M. Treffinger, Eaton; Read B. Harding, Fairfield; C. W. Holtzmuller, Farmersville; O. Willard Hoffman, Franklin; J. R. Alley, Chas. F. Frankman, M. M. Kane, C. J. Mills, R. T. Poling, A. F. Sarver, R. M. Zeller, Greenville; Vera C. Iber, Hamilton; W. B. Roads, Hillsboro; C. E. Mumma, Lewisburg; W. A. Holman, John A. Knapp, R. S. Postle, London; J. M. Coleman, Loveland; F. C. Callaway, Angus Mac Ivor, J. M. Snider, H. G. Southard, H. E. Stricker, Marysville; Arthur B. Ream, Mechanicsburg.

A. G. Allen, Miamisburg; A. J. Dell, Mildred White Gardiner, H. S. Murat, Mildred L. Snyder, Willis A. Whitman, Middletown; John Dean Boylan, Milford Center; R. H. Jones, New Carlisle; T. H. Winans, Osborn; John T. Quirk, Piqua; G. A. Woodhouse, Pleasant Hill; D. W. Shellabarger, Potsdam; H. C. Duke, F. M. Wurtsbaugh, Richwood.

Frank C. Andrus, Frank Anzinger, Jr., N. A. Brandeberry, Carl T. Doeing, H. B. Elliott, C. E. M. Finney, Frank A. Halloran, D. W. Hogue, Clement L. Jones, G. M. Lane, H. B. Martin, Louis H. Mendelson, Paul R. Minich, Wm. B. Quinn, Springfield; C. F. Puterbaugh, E. G. Puterbaugh, Tippecanoe City; Alfred E. Stout, Waynesville; James H. Beaton, West Carrollton; Charles Baker, E. T. Pearson, West Milton; Robert Conard, C. E. Kinzel, Wilmington.

S. C. Ellis, Paul D. Espey, Ben R. McClellan, R. McClellan, C. G. McPherson, John R. Moore, G. E. Savage, Xenia; David Taylor, Yellow Springs.

SPEAKERS AT REMAINING MEETINGS

The following additional meetings have been scheduled:

October 5—Dayton—"Intestinal Obstruction", by Dr. W. B. Morrison, Columbus; "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by Dr. M. D. Douglass, Cleveland.

October 19—Springfield—"Common Psychoses", by Dr. George T. Harding, Columbus; "Cancer of the Breast", by Dr. Carl R. Steinke, Akron.

November 2—Dayton—"Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. John A. Toomey, Cleveland; "Tuberculosis in Infancy", by Dr. J. Victor Greenebaum, Cincinnati.

November 16—Springfield—"Prenatal and Postnatal Care", by Dr. Floyd S. Mowry, Cleveland; "Infections of the Urinary Tract", by Dr. G. P. McKim, Cincinnati.

November 30—Dayton—"Clinical Aspects of Arteriosclerosis", by Dr. Clifford J. Straehley, Cincinnati; "Fungous Infections of the Skin", by Dr. Claude B. Norris, Youngstown.

December 14—Springfield—"Arthritis: Medical Aspects", Dr. Louis A. Levison, Toledo; "Arthritis: Orthopedic Aspects", by Dr. Walter G. Stern, Cleveland.

MEETING AT ZANESVILLE

Dr. Chas. J. Roach, president of the Muskingum County Academy of Medicine, presided at the meeting held at the Grotto Hall, Zanesville, Thursday evening, September 8. Prior to the scientific program, Dr. Louis N. Jentgen, Columbus, member of the Sub-Committee on Regional Postgraduate Lectures, explained the objectives of the lecture series and requested those present to attend subsequent meetings and bring their colleagues. Addresses were made by Dr. Harold Feil, Cleveland, on "Clinical Aspects of Arteriosclerosis", and by Dr. James R. Driver, Cleveland, on "Treatment of Early Syphilis". Ninety physicians registered at the meeting. They were:

THOSE IN ATTENDANCE

J. A. Haney, E. D. Kackley, Adena; H. C. Ashton, Basil; Leo D. Covert, C. W. Kirkland, H. E. Ring, Bellaire; J. W. Whittus, Baltimore; John S. Campbell, Philip Rusk, R. P. Rusk, Cadiz; W. E. Radcliff, Caldwell; C. A. Craig, W. L. Denny, E. F. Hunter, O. R. Jones, George F. Swan, Cambridge; Lewis W. Cellio, Carrollton; L. N. Jentgen, Columbus; James Miller, Corning; S. D. Cohen, J. G. Smailes, E. M. Wright, Coshocton;

Edgar D. Allen, A. C. Lawrence, Crooksville; David H. Allen, Dover; L. P. Cassady, Ray McDaniel, East Fultonham; James E. Thompson, Freeport; Mary Elizabeth Rowland, Gnadenhutten; H. A. Martin, Gratiot; R. W. Miller, Hemlock; James A. L. Toland, Jewett; W. D. Porterfield, Junction City.

C. G. Axline, Carl W. Brown, W. R. Coleman, C. H. Hamilton, A. M. Kelly, L. E. Stenger, Lancaster; E. B. Roller, Lithopolis; W. S. Hawn, R. W. Riggs, Marietta; E. G. Rex, McConnelsville; W. B. Devine, Nashport; H. B. Anderson, Newark; J. Herbert Bain, John M. McCleery, New Concord; O. D. Ball, F. J. Crosbie, H. F. Minshull, C. B. McDougal, J. G. McDougal, New Lexington; D. M. Ceramella, New Philadelphia; Claude V. Davis, Pennsville.

G. L. Ramsey, Powhatan Point; N. M. Newport, Roseville; C. P. Swett, Sugar Grove; O. J. Letherman, Thornville; A. R. Burkhart, C. E. Richman, Woodsfield; F. D. Adams, R. B. Bainter, W. C. Bateman, J. H. Boulware, Edmund R. Brush, S. P. Carter, Daniel G. Caudy, O. I. Dusthimer, Philip H. Elliott, Myron Freilich, Mary B. Graham, P. William Haake, Beatrice T. Hagen, T. H. Infield, Lester Lasky, M. A. Loebell, George C. Malley, Robert S. Martin, S. W. Obenour, Margaret O'Neal, A. C. Ormond, Flora M. Pedicord, Fred W. Phillips, C. Prouty, C. J. Roach, W. F. Sealover, C. F. Sisk, Earl B. Zurbrugg, Zanesville.

Dr. C. C. Sherburne, Columbus, spoke on "Pneumonia" at the meeting in Zanesville, September 22. Dr. Cecil Striker, Cincinnati, discussed "Diabetes" at the same session. The program for the remainder of the course follows:

FUTURE PROGRAMS REVIEWED

October 6—"Arthritis: Medical Aspects", by Dr. A. B. Brower, Dayton; "Arthritis: Orthopedic Aspects", by Dr. W. Richard Hochwalt, Dayton.

October 20—"Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. S. H. Ashmun, Dayton; "Tuberculosis in Infancy", by Dr. H. J. Gerstenberger, Cleveland.

November 3—"Common Psychoses", by Dr. E. A. Baber, Cincinnati; "Cancer of the Breast", by Dr. R. S. Dinsmore, Cleveland.

November 17—"Prenatal and Postnatal Care", by Dr. Theodore Miller, Cleveland; "Infections of the Urinary Tract", by Dr. Wm. J. Engel, Cleveland.

December 1—"Angina Pectoris and Coronary Thrombosis", by Dr. Wm. H. Bunn, Youngstown; "Fungous Infections of the Skin", by Dr. E. W. Netherton, Cleveland.

December 15—"Intestinal Obstruction", by Dr. E. R. Arn, Dayton; "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by Dr. Philip J. Reel, Columbus.

Attention has been called to an error in the program for the Zanesville meetings. Inadvertently, the biographical data concerning Dr. E. A. Baber, who will speak on "Common Psychoses", November 3, states that he is a member of the American Neurological Association and the American Association of Neuropathologists. This should have read, "member of the American Psychiatric Association and a Diplomate of the American Board of Psychiatry and Neurology".

Session of Fifth District Society Will Be Held in Cleveland, Oct. 21

A meeting of the Fifth Councilor District of the Ohio State Medical Association will be held in the Allen Medical Library Auditorium, 2009 Adelbert Road, Cleveland, Friday, October 21.

The morning session will begin at 11 o'clock with an address by Dr. A. D. Nichol on "Clinical Observations on the Hyperactive Carotid Sinus", with motion picture demonstration. Other speakers at this session will be Dr. A. Strauss, "The Management of Undescended Testes, with Demonstration of Cases", and Dr. E. E. Beard, "Endocrine Aspects of Pituitary Tumors".

An organization luncheon for members of the district will be held at 12:30 P.M. at the Cleveland Club.

There will be two sessions in the afternoon, the first beginning at 2 o'clock. The speakers will be: Dr. Gerald S. Shibley, "The Treatment of Pneumonia"; Dr. John A. Toomey, "Treatment of the Meningitides", and Dr. Curtis F. Garvin, "The Dangers of Sulphanilamide Therapy, with Report of Cases". A short recess will follow this session.

Three papers will be presented at the second afternoon session, beginning at 4 o'clock, viz., "The Early Diagnosis and Treatment of Pulmonary Tuberculosis", Dr. R. C. McKay; "A Simple Test for Determining the Presence of Gastro-Intestinal Lesions", Dr. E. E. Woldman, and "Treatment of Carcinoma of the Rectum", with motion picture demonstration, by Dr. T. E. Jones.

No special arrangements have been made for dinner. Numerous good restaurants are easily accessible in the immediate neighborhood of the Medical Library Building.

The evening session, beginning at 8:15 o'clock, will be a general meeting under the auspices of the Cleveland Academy of Medicine. An address of welcome will be made Dr. Hubert C. King, president of the Academy. Dr. Barney J. Hein, Toledo, President of the Ohio State Medical Association, will make a brief address in behalf of the Association, and Dr. Clifford J. Barborka, Chicago, will speak on "The Management of Nutritional Diseases".

Arrangements for the meeting are being made by Dr. Edgar P. McNamee, Cleveland, Councilor for the Fifth District, and H. Van Y. Caldwell, executive secretary of the Cleveland Academy of Medicine.

In Our Opinion:

Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Constructive Program of A.M.A. Should Meet With Public Favor

If *The Journal* devotes more space this month than has been customary in past months to news and comments with respect to economic and legislative matters involving the practice of medicine and distribution of medical care, it is because these questions seemingly are of unusual current interest.

Therefore, we hope to be forgiven for another reference.

Those who read the details of the program evolved by the House of Delegates of the A.M.A. at its special session in Chicago, September 16 and 17, published elsewhere in this issue, probably will wonder what the reaction of the public will be to the proposals (constructive, we believe) which the medical profession has offered.

It is difficult to get a cross section of public opinion on any question. Yet, two illustrations may offer some clue.

After the final session of the A.M.A. House of Delegates, a news writer for one of the large press agencies was asked whether in his opinion the action taken was constructive or destructive. His unqualified answer was that, in his opinion, the action was constructive and that he could place no other interpretation on it in the article which he planned to write.

In the September 19 issue of *The Cleveland Plain Dealer*, the following editorial appeared:

"That Medicine May Serve Better"

"By its action Saturday at Chicago the house of delegates of the American Medical Association goes a long way to refute the criticism, heard in many quarters, that the association in its zeal to protect existing professional methods, ignores the plight of a vast number of Americans who now lack adequate medical service because they can not afford to pay for it at the going rates.

"In five recommendations the doctors' spokesmen agree with most of the provisions of the national health program proposed recently by President Roosevelt's committee on health and welfare, including items which led to sharp controversy at the recent Washington conference where the committee's program was submitted.

"They take sharp issue, however, with the committee's suggestion of a system of compulsory health insurance on a national scale, similar to the system which has operated in Great Britain for almost a generation, and which prevails in most other nations.

"On this point the delegates, who represent some 110,000 physicians throughout the country, unquestionably reflect the majority view of their colleagues. But the delegates do well to recognize that mere negation of methods with which they may not agree does not meet the harsh realties of the problem of medical care.

"Encouraging, therefore, is the co-operative attitude of the association, as shown by its specific approval of use of federal and state funds for better care of the tubercular and mental patients, for the expansion of maternal and child welfare and public health services, as well as the recommendation of better methods to compensate workers for loss of income during illness, which now puts a $900,000,000 a year hole in the earnings of Americans in the lower income groups."

What interpretation will be placed on the Chicago meeting by other newspapers and how the public generally will react, we cannot predict. However, it seems to us as if the action at Chicago does not merit use of the old and over-used stereotyped headlines: "Doctors Fight . . .", "Doctors Oppose . . .", "Medics Battle . . .", and similar negative captions.

The legislative and policy-making body of the American Medical Association has offered something constructive and definite. How well this concrete program will succeed will depend for the most part on the initiative and ingenuity of state and local medical societies, providing, of course, they are not throttled in their efforts by those who are demanding unsafe short-cuts or those who are willing to make health a political football.

It cannot be denied that there is a growing sentiment in the minds of the American people that some change in the present method of paying for medical service is very much needed for those citizens who are classed in the low income group.—The Journal of the Iowa State Medical Society.

Speak up! No One Has a Corner on Brains and Ideas

In August, *The Journal* published two letters entitled, "If You Don't Favor State Medicine, What Do You Favor" and "I Should Like to Continue to Be Able to Hold My Head High", presenting both sides of the question of socialized medicine and brief editorial comment about them.

Since then, quite a number of members have communicated with *The Journal* and the Headquarters Office, setting forth their reactions to the two letters and offering suggestions as to how

they believe the troublesome questions confronting the profession might be solved.

Space limitations have prevented *The Journal* from publishing these recent communications. However, all of them have been submitted to the special committee of The Council which has the national emergency and similar questions under consideration. We have been assured that they will be given careful consideration by that committee.

The Journal is pleased that it has been able to stimulate thought and action on the part of some members. It regrets that more members have not sent in their views. It hopes more replies will be received.

What have you to offer? Have you any suggestions for the officers and the special committee of The Council? How do you think the profession should act to meet the situation at Washington and in many local communities? Speak up! No one has a corner on brains or ideas. You may be able to furnish the clew to the puzzle.

In the emotion and heat of arguments over socialized medicine . . . let us keep our heads cool and our feet on the ground.—Northwest Medicine.

Every Physician Can Be a Public Relations Counsel, If He Will

During the past month newspapers all over Ohio have editorialized on the recent National Health Conference, the cooperative medical scrap at Washington, and on proposals from here and there to streamline the practice of medicine.

There is nothing unusual about this display of interest on the part of the daily press. Public health and medicine are vital subjects. They make good copy. They lend themselves to reader-interest. They are "naturals" for the editorial writers.

Some of the comments have been accurate and fair; others have been somewhat biased and founded on inaccuracies. Even some news writers and editors are misinformed about and find it difficult to understand some of the current, important questions relating to the practice of medicine and distribution of medical services. If those who are in a position to obtain accurate data are uninformed and confused, what of the public?

Missionary work is imperative. The profession must do it.

Has your local newspaper published editorials on the much-discussed topic of socialized medicine? If so, was the presentation fair, unbiased and accurate? If it was that, have you taken the time to commend the editor personally or in writing? If it was not, have you contacted the editor, given him facts and tried to clarify the issue for him?

This is public relations in the real sense of the word. It is the type of public relations in which every physician can participate. It is the kind of activity which will accomplish something.

Boiler-plate publicity never sees anything but the wastebasket and by the same token, high-hat, winged-collared public relations counsel usually finds the welcome sign on the door mat missing. However, when the folks at home speak up or pay a visit, the local editor sits up and takes notice. Try it sometime.

The most devastating criticism that can come to a physician is not that he is unable to care for all who might desire his services, but that he fails to give the best to those whom he serves.—Detroit Medical News.

More Players, Fewer Spectators Needed; Will You Volunteer?

Those who contend that the medical profession is drifting and that medical organization is taking a do-nothing attitude regarding the important questions confronting the profession as well as the public, are unobserving, to say the least.

An illustration of how medical organization in Ohio is attempting to meet and solve various problems affecting the profession and of direct interest to physicians, as well as laymen, is found in the activities of the various agencies and committees of the Ohio State Medical Association.

For the sake of explanation, let's take the period starting with **July 30.**

On that date the Committee on Public Relations and Economics held a six-hour meeting in Columbus. A heavy docket of questions was considered and definite, constructive action taken on most of them.

The Council of the Association met on the following day—**Sunday, July 31**—when part of the morning and most of the afternoon were devoted to official business and the formation of ways and means of meeting situations developing at Washington.

At the meeting of The Council, the President was authorized to name a special committee, charged with the responsibility of considering the national emergency and working out constructive plans for coping with it. That committee held an all-day session in Columbus on **Sunday, August 21.**

Plans for a political and legislative program, which will be the most intensive ever undertaken by the medical profession of Ohio, were made at a

meeting of the Sub-Committee on Legislation held on **Sunday, September 11,** in Columbus.

Poor relief—one of the most vital and controversial questions before the profession—was considered and a working program evolved at an all-day meeting of the Special Committee on Poor Relief of the State Association on Sunday, **September 18,** in Columbus.

Another lengthy session of the special emergency committee of The Council was held in Columbus on **Sunday, September 25.**

On Saturday evening, **October 1,** The Council will meet in Columbus, with another heavy docket before it and on the **following day** a state-wide legislative conference of presidents, secretaries and legislative committeeman of all county medical societies with the Sub-Committee on Legislation will be held in Columbus for the purpose of mapping out real action in political and legislative affairs.

The Committee on Public Relations and Economics will meet again on **Sunday, October 16,** and **Sunday, October 23,** has been selected as the tentative date for a meeting of the Committee on Scientific Work with the officers of the various Scientific Sections, for the purpose of making preliminary plans for the 1939 Annual Meeting which will be held in Toledo on May 3 and 4.

These meetings do not take into consideration work of members of these committees individually or in group conferences with physicians or county medical societies. They do not take into consideration field work done by members of The Council and members of the Sub-Committee on Legislation. They do not take into consideration field work done by the President and the President-Elect. They do not take into consideration the daily activities of the personnel of the State Headquarters Office.

They do reveal that work—and plenty of it—is being done in the interests of the profession. Turn to the roster of officers and committees of the State Association published in the front part of *The Journal.* **There you will find that approximately 100 members of the profession are serving in some official capacity—many more than ever before.** When we say serving, we mean serving as these are not paper committees. Those 100 members are sacrificing time and energy in efforts to work out some of the problems of the profession and to provide benefits for all members of the Association. It is not easy for these men to take time off for field work. Trips to Columbus on Sundays for all-day meetings can hardly be interpreted as joy-rides or pleasure junkets. The responsibilities which these men have assumed are not simple. **They have not taken their assignments lightly. On the other hand, all have given conscientiously of time and energy and are seriously trying to do the very best they know how.**

Nevertheless, with all due respect to the intelligence and initiative of the officers and committeemen of the State Association, it is our opinion that they alone cannot solve the problems of the profession and cannot achieve all which the Association hopes to accomplish.

They are a comparatively small group—competent, to be sure—which will be able to accomplish little unless they have the active support of the 6,000 members of the Association.

Activities of the State Association are not like a football game where 22 men punt, pass and pray while their friends and supporters sit on the sidelines cheering. **Everyone must take part in the game which the Association is playing.**

The point is simply this: **The officers and committees of the Association need suggestions and proposals from individual members. They must have the active help of county medical societies and members of county medical societies when requests for assistance in the various counties are issued. They need volunteers locally for carrying out the activities and programs devised.**

Send in your suggestions. Lend your assistance when requested to do so. Volunteer for service.

The officers and committeemen of the State Association (of local societies, for that matter) can set up the machinery and make the plans but it takes the entire membership to man the machines and make the plans click.

The much-used phrase, "It Can't Happen Here", seems to be less and less an exclamation and more and more a question.—The Wichita Medical Bulletin.

Another Brand New Way to Spend That Which You Don't Have

Through the specs of the editor of *Nation's Business* comes the following comment regarding the amusing, at the same time pitiful, spending-taxing ingenuity of the New Deal:

"Two headlines are spread across the same front page, side by side. Both originate from one fount, but never the twain shall meet.

"Surgeon General Parran of the U. S. Public Health Service says his dream-program for universal health—priced at $8,500,000,000—means a new era for benighted America.

"In the column alongside we read that Government experts seek new sources of revenue to tax.

"One branch of the Washington leviathan hatches a grand new scheme for spending money it doesn't have, while another branch studies in bewilderment how to pay for what the spenders already have ordered. The Bourbon kings of France had the same problem of revenue raising. They tried to solve it by farming out the collection of taxes to private individuals. These farmer-generals, as they were called, developed a devilish ingenuity in bleeding the people for more and more revenue. They finally drove the tax-

payers to desperation. Nevertheless, the efficiency of their system might suggest itself to the Treasury experts."

Admitting that there are certain people who need medical care which they can't buy at present wage scales and that some plans must be worked out to assist those folks, it does sound a bit silly, doesn't it, to try to solve their difficulties by launching a gigantic program which will cost millions and millions of dollars in taxes, a part of which will be contributed by the very people—every last one of them, directly or indirectly—for whom the program is devised but who haven't enough to make both ends meet because employers have to contribute so much to government through taxes that they can't raise wages and salaries?

But, of course, these are silly times in a lot of ways.

The deflection of the people's savings from industrial ventures to political spending since 1930 has not added a single man or woman to a wealth-producing payroll.—Merle Thorpe.

Parable of the Auto In the Glass Case and the Truant Doctor

Have you ever checked the names of physicians who attend the Annual Meeting of the State Association, the regional postgraduate lectures, the district meetings and county society gatherings?

It is a rather interesting stunt to find out who attends medical meetings—the training camps of the medical profession.

You will find there are some men who never miss a meeting—a chance to improve their knowledge, listen to new things, whenever it is possible for them to do so. You will find that there are some men who never appear. They are the ones who will awaken some day and wonder why and when the parade went by.

Not so long ago Charles F. Kettering, Dayton, director of the General Motors Research Laboratories and as keen a practical philosopher as there is today, addressed a group of industrial surgeons. To illustrate a point, Mr. Kettering told a story which, in our opinion, is a perfect illustration of why the modern physician must attend medical meetings, must keep up with the parade, must keep himself refreshed with the new things taking place almost daily in medical science.

Said Mr. Kettering:

"Look at Mr. Curtice's automobile. I had to invent a thing a long time ago when he was not yet with Buick. They had the twenty-fifth anniversary of the Buick motor car. It was a terribly hot day in July, and they had the meeting up in the Technological building. I was one of the speakers, one of the last speakers—they always have the acrobats at the end. One gentleman got up and said he didn't think that as long as the Buick Motor Car Company lasted they would ever make a better motor car. It was to stop that point of view that I invented 'The Automobile in the Glass Case.'

"Mr. DeWaters and all of the boys who had to do with designing the Buick were sitting down in front. 'Now,' I said, 'you gentlemen pick me the best motor car you can make—not the kind you build, or the kind you sell to your customers—one of the super deluxe kind they let the management drive. Let us set it up here on the table. It is perfect, paint job is perfect, upholstering is perfect, engine is perfect, transmission and everything. Let's put it in a glass case, and on the outside—or rather on the inside—we will put the price—$1,500 or $2,000, whatever it is, just like they used to post the stock on the bank door. The understanding is that under no conditions will that motor car change one bit from the day we put it in there. It is hermetically sealed. A year from today, let's look at that car. It is as good as it was last year. But the prospective customer says: It was a good car, but the price is too high. You say $2,000. I will give you $1,800 for it. Let's come back every year, and at the end of the 10 years, what do we have? Here is this same beautiful motor car. But, the customer says, the junk man is the only fellow who will pay you anything for that.'

"Why? Because the motor car depreciated? No, it couldn't depreciate in the glass case. It was the appreciation of new car designs. They had appreciated in 10 years equal to the total value of that car.

"That is true clear across the board of every endeavor of humankind. Today it is the best we have, and tomorrow not quite good enough, and day after tomorrow not quite that good, because we know so little about anything. That is not criticizing the many who came before, but it illustrates how well we use what we have."

Many a man fails to become a thinker for the sole reason that his memory is too good.—Nietzsche.

Plan for Prepayment of Medical Bills Studied By Cleveland Academy

Widespread publicity has been given to a proposal sponsored by the Economics Committee of the Cleveland Academy of Medicine for the prepayment of medical bills by persons covered by the Cleveland group hospitalization plan.

In announcing its proposal, the Economics Committee presented the following report to the council and trustees of the Academy.

"The Economics Committee has given careful consideration to the problem of prepayment for medical services and has arrived at the following conclusions:

"1. Since the average person in the low income brackets is able to pay for care for slight illnesses (cost about $30.00 a year per family with incomes below $2,000.00 a year) there is

need only for some kind of prepayment for the 14 per cent of severe illness to which he or his family may be subjected.

"2. In a metropolitan community care for most of these severe illnesses will be given in hospitals.

"3. The Cleveland Hospital Service Association now has more than 100,000 subscribers to whom 21 days of hospital care is furnished in any one year for a prepayment of from $7.20 to $9.00 annually. This plan is ethical, actuarially and socially sound.

"4. It is desirable to design a plan for prepayment of medical bills to parallel the payment of hospital bills, limited to those who are hospitalized under the Hospital Service plan. In this way the Academy of Medicine will be rendering a service to the public and to the medical profession and will be in the front rank of those desiring to help solve the financial problems incidental to medical care.

"The plan for your consideration conforms to the principles laid down by the House of Delegates of the American Medical Association and is therefore ethical. It is sound from the actuarial standpoint and if it can be sold to the public will be socially and economically helpful.

Outline of the Plan

"1. The Academy of Medicine shall incorporate a not for profit organization to carry out the plan.

"2. The plan is to be operated in conjunction with the Hospital Service Plan and policies are to be issued only to those holding Hospital Service contracts. It may possibly be merged with the Hospital Service Plan under a new name incorporating the words, Academy of Medicine.

"3. For each day of hospitalization the plan would provide payment for medical services in an amount of $6.00 a day. This is the approximate amount paid to the hospitals under the Hospital Service plan. The Hospital Service Association has been able to pay to the hospitals over $800,000.00 in the past four years and to build up a reserve of $237,000.00. A plan paying a similar amount for medical services for the same prepayment would therefore be sound.

"4. Anyone licensed to practice medicine by the State of Ohio would be eligible to care for patients under this plan. It would therefore not disturb or change in the slightest manner present methods of individual practice.

"The Economics Committee moves that the Council and Trustees of the Academy approve this plan in principle and instruct the President to appoint a committee to work it out, in consultation with the Trustees of the Hospital Service Association."

Comment on the plan at this time would be premature, except to say that it appears to be sound in principle. It may be a partial solution to the economic problem of financing medical care but its success will depend largely on general provisions and details which are decided upon. At present these matters are being considered and after a detailed plan has been drafted, the membership of the Academy will be requested to voice its opinion. The subject is mentioned at this time because no doubt many members of the State Association have seen the newspaper articles and comments referring to it and have wondered what it is all about.

It is not merely "social security" but job security which the political parties should be seeking to establish today.—David Lawrence.

You Should Know How the Candidates Stand; Ask Them

Scenes such as those which took place during the famous Lincoln-Douglas debates of historical significance may be re-enacted in Ohio if Senator Robert J. Bulkley and his Republican opponent, Robert A. Taft, carry out their agreed plan of staging a series of public debates on national issues prior to the General Election on November 8.

In challenging Senator Bulkley to debate, Mr. Taft submitted the following propositions:

"THAT New Deal policies are threatening the destruction of American democracy and retarding recovery.

"THAT the administration of relief should be turned over to the state and local governments and merely be financed by the federal government.

"THAT the social security program should be revised.

"THAT the government should adopt a definite program of public works, including flood control.

"THAT the present farm bill is detrimental to farmers.

"THAT the Wagner Labor Relations Act should be revised."

In our opinion a proposition: "That compulsory health insurance which would place the practice of medicine under governmental regulation and control would be detrimental to public health, in that it would lower the standards of medical care and throttle medical progress" might well be added to the list.

It might not be amiss for physician friends of the two contestants to suggest this to them.

The public, as well as the profession—also candidates—might just as well face the issue. The public, as well as the profession, will want to know—deserves to know—how the candidates, not only Mr. Bulkley and Mr. Taft, but all candidates for the Congress, regard this vital question. There is nothing mysterious or spooky about the question. There should be no pussyfooting.

Let's find out now which candidates want the government to practice medicine and which believe that this should be left to the medical profession, in which they have enough confidence to anticipate that it will evolve practical methods of meeting the health problems of all, providing solutions are found first for the basic economic

problems which are largely responsible for all others—including health.

Which reminds us that we know of one physician who has written his incumbent Congressman somewhat as follows:

"Dear Mr. _____:

"I have greatly admired you for the courage you have displayed while under fire and for your unwillingness to be a 'yes man'. You have a good record, in my opinion, and I would like very much to support you this Fall. However, before I can arrive at a definite decision I must know your attitude toward proposals which would turn over the practice of medicine to the government and politicians; provide the people with a brand of medical care that would be putrid by comparison with that they are now receiving; deprive persons from utilizing the services of physicians of their own choice; and obstruct progress in scientific medicine in about the only nation on the face of the earth where there still is some incentive for personal initiative and individual advancement in medicine as well as in some other fields of endeavor."

"Reserving a final decision as to how I shall cast my vote, pending your reply, I remain", etc.

That physician will know before the General Election how he shall vote and why.

It's not a bad idea. Try it.

Excellent Array of Talent Will Present Program at Northwestern Ohio Society Meeting, Oct. 4

Many physicians throughout the state are planning to be in Defiance, Tuesday, October 4, to hear the unusually fine array of medical talent which has been secured to speak at the Ninety-Fourth Meeting of the Northwestern Ohio Medical Association. The scheduled program follows:

MORNING SESSION

High School Auditorium

9:00 to 9:45 A.M.
"Ophthalmology in General Practice"
Albert D. Frost, M.D., Professor of Ophthalmology, Ohio State University College of Medicine, Columbus, Ohio

9:45 to 10:30 A.M.
"Precancerous Dermatoses and Malignancy of the Skin"
Harold N. Cole, M.D., Clinical Professor of Dermatology and Syphilology, Western Reserve University School of Medicine, Cleveland, Ohio

10:30 to 11:15 A.M.
"Facial Reparative Surgery"
Claire L. Straith, M.D., Detroit, Mich.

11:15 to 12 Noon
"Clinical Indications for the Anterior Pituitary Like Hormone"
Robert L. Schaefer, M.D., Detroit, Mich.

12:00 to 1:00 P.M.—Luncheon
(Place to be announced)

AFTERNOON SESSION

High School Auditorium

1:00 to 1:45 P.M.
"Post Partum Hemorrhage"
Frederick H. Falls, M.D., Professor of Obstetrics and Gynecology, University of Illinois College of Medicine, Chicago, Ill.

1:45 to 2:30 P.M.
"Sulphanilamide"
W. Halsey Barker, M.D., Johns Hopkins Hospital, Baltimore, Md.

2:30 to 3:15 P.M.
"Functional Disorders of the Intestinal Tract"
Lowell D. Snorf, M.D., Assistant Professor of Medicine, Northwestern University Medical School, Chicago, Ill.

3:15 to 3:30 P.M.—Business Session
Presentation of Resolutions

3:30 to 4:15 P.M.
"Clinical Aspects of Vascular Disease"
Roy W. Scott, M.D., Professor of Clinical Medicine, Western Reserve University School of Medicine, Cleveland, Ohio

4:15 to 5:00 P.M.
"Displacement of the Lumbosacral Spine Associated with Backache"
Henry W. Meyerding, M.D., Mayo Clinic, Rochester, Minn.

6:00 to 7:00 P.M.—Dinner
High School Community Room

EVENING SESSION

High School Auditorium

7:00 to 7:45 P.M.
"Clinical Research in Private Practice"
Wingate M. Johnson, M.D., President of the Medical Society of the State of North Carolina, Winston-Salem, N. C.

7:45 to 8:30 P.M.
"The Question of Responsibility in Psychiatric Practice"
A. A. Brill, M.D., New York, N. Y.

8:30 to 9:15 P.M.
"Endocrine Aspects of Sterility"
Emil Novak, M.D., Associate Professor of Obstetrics, University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md.

On Monday, October 3, the day prior to the meeting, a golf tournament will be held at the Kettenring Golf Course, Defiance.

Officers of the Association, who have arranged this fine program, are: Dr. Edward B. Pedlow, Lima, president; Dr. W. D. Hickey, Leipsic, vice-president; Dr. D. J. Slosser, Defiance, secretary; and Dr. D. B. Spitler, Hoytville, treasurer; and the Third and Fourth District Councilors of the Ohio State Medical Association, Dr. O. P. Klotz, Findlay and Dr. Edward J. McCormick, Toledo.

INTERESTING DATA REGARDING OHIO MEDICAL SCHOOLS AND HOSPITALS FOUND IN RECENT REPORT OF A.M.A. COUNCIL

THE thirty-eighth annual presentation of educational data by the Council on Medical Education and Hospitals of the American Medical Association for the academic year 1937-1938, as published in the August 27, 1938 issue of *The Journal of the A.M.A.*, pages 785-847, contains much interesting information and statistical data on the present status of medical education in the United States and Canada.

Included are revised lists of hospitals approved by the Council for internships and residencies in specialties and schools for occupational therapy, physical therapy and clinical laboratory technicians. The recently revised Essentials of an Acceptable Medical School and the Essentials of an Acceptable School of Occupational Therapy are reprinted.

DATA ON 87 MEDICAL SCHOOLS

Data are presented concerning 77 medical schools in the United States and 10 in Canada. Approval of three of the 77 medical schools has been withdrawn, viz., University of Arkansas School of Medicine, Little Rock, Ark.; University of North Dakota School of Medicine, Grand Forks, N. D., and University of South Dakota School of Medical Sciences, Vermilion, S. D. Since June 6, 1937, Meharry Medical College, Nashville, Tenn., has been on probation. All other schools covered by the report have the full approval of the Council.

Additional statistics cover 729 hospitals approved for internships, 451 hospitals offering approved residencies in specialties, six schools for the study of occupational therapy, 13 schools for physical therapy technicians and 137 schools for clinical laboratory technicians.

INFORMATION ABOUT OHIO COLLEGES

The report contains the following descriptive, historical and factual data concerning Ohio's three Class A medical schools:

University of Cincinnati College of Medicine, Eden and Bethesda Avenues—Organized in 1909 by the union of the Medical College of Ohio (founded in 1819) with the Miami Medical College (founded in 1852). The Medical College of Ohio became the Medical Department of the University of Cincinnati in 1896. Under a similar agreement, March 2, 1909, the Miami Medical College also merged with the University when the title of Ohio-Miami Medical College of the University of Cincinnati was taken. Present title assumed in 1915. Coeducational since organization. Candidates for admission to the freshman class must present three years of college preparation of not less than ninety hours. All candidates taking premedical work at the College of Liberal Arts, University of Cincinnati, must sign up for the seven-year combined course, and at the end of one year of satisfactory work in the College of Medicine the B. S. degree is granted by the College of Liberal Arts. The faculty consists of 50 professors and associates, 412 assistants, etc., a total of 462. The course covers four years of eight months each, on the completion of which the M.B. degree is granted. A year's internship in an approved hospital is required, on completion of which the M.D. degree is granted. Beginning with the fall session of 1938-1939 the fees are as follows: For legal residents of Cincinnati, $450 a year, plus laboratory fees, ($50 additional for those not legal residents of Cincinnati). The registration for 1937-1938 was 294; graduates, 72. The next session begins Sept. 23, 1938, and ends June 9, 1939. The Dean is Alfred Friedlander, M.D.

Western Reserve University School of Medicine, 2109 Adelbert Road.—Organized in 1843 as the Cleveland Medical College in cooperation with Western Reserve College. The first class graduated in 1844. It assumed the present title in 1881. In 1910 the Cleveland College of Physicians and Surgeons was merged. Coeducational since 1919. The faculty includes 84 professors and 228 lecturers, assistants and others, a total of 312. The curriculum covers three years of nine months each and one year of ten months. Three years of collegiate work is required for admission and a baccalaureate degree for graduation. The total fees for each of the four years are, respectively, $442, $425, $415 and $425. The registration for 1937-1938 was 270; graduates, 63. The next session begins Sept. 22, 1938, and ends June 14, 1939. The Dean is Torald Sollmann, M.D.

Ohio State University College of Medicine, Neil and Eleventh Avenues.—Organized in 1907 as the Starling Ohio Medical College by the union of Starling Medical College (organized in 1847 by charter granted by the State Legislature changing the name from Willoughby Medical College, which was chartered March 3, 1834) with the Ohio Medical University (organized 1890). In 1914 it became an integral part of the Ohio State University with its present title. Coeducational since organization. The faculty consists of 68 professors, associate and assistant professors, 84 lecturers, instructors, demonstrators and others, a total of 152. Three years of collegiate work is required for admission. The course covers four years of thirty-four weeks each. Tuition fees are $246, $231, $231 and $231 each year, respectively, for residents of Ohio, and $150 additional for nonresidents. The registration for 1937-1938 was 331; graduates, 92. The next session begins Oct. 4, 1938, and ends June 12, 1939. The Dean is J. H. J. Upham, M.D.

ESSENTIALS OF ACCEPTABLE SCHOOL

The Essentials of an Acceptable Medical School were recently revised by the Council and ratified by the House of Delegates of the American Medical Association at its 1938 session. They are published in full in the report of the Council. The principal change is the recommendation that medical schools not already doing so select their beginning students from among those having three years of college work rather than the minimum requirement of two years. This recommen-

dation was based on a study made in 1937 showing that more than half of the students (3,181) admitted for the session 1936-1937 had a college degree before beginning medicine and 32 per cent had more than four years, leaving only 12 per cent with the minimum of two years.

It was stated in the report of the Council that substantial improvements have been and are being made in a large number of medical schools in faculty personnel, student selection, clinical facilities, buildings and equipment. Nineteen schools have reported budget increases which average $43,300 yearly. Among a list of institutions credited with having greatly improved their physical plant during the past four years is Ohio State University College of Medicine.

GRADUATE MEDICAL EDUCATION

An innovation in this year's report is a study of graduate medical education in 23 states. Opportunities for practicing physicians to engage in further training were surveyed in these states in accordance with a fact finding study approved by the House of Delegates at its session in May, 1936. Subsequent reports will consider the graduate program of other states, including Ohio.

SOME INTERESTING STATISTICS

Following are some of the statistical highspots gleaned from the report:

Medical students enrolled in the United States during the year 1937-1938 numbered 21,587. The enrollment in Canadian schools was 2,954. Since July 1, 1937, 5,691 received M.D. degrees, 5,194 from schools in the United States and 497 from Canadian institutions. In addition, there were 125 part-time, 376 special and 722 graduate students studying in medical schools.

The state furnishing the greatest number of medical students was New York with 3,063, followed by Pennsylvania with 1,926, Illinois with 1,488 and Ohio with 1,138.

Of the 895 students in Ohio's three schools, 627 were natives of the state and 268 were born elsewhere.

During 1937-1938 there were 1,161 women studying medicine in the United States. The percentage of women to all students for the academic year was 5.4. There were 237 women graduates.

Of the 5,691 graduates during the year, 3,685 held baccalaureate degrees.

The number of medical schools, students and graduates and students in the United States for each five-year period from 1905 to 1920 and for each year thereafter is shown in Table 1. It will be noted that the total number of undergraduate medical students last year was the lowest since 1931. This is attributable to the fact that many of the schools have decreased their freshman enrollment, heeding the advice of the Council in 1935 against the admission of larger classes than can be accommodated or that can reasonably be expected to satisfy approved scholastic standards. It was pointed out in the Council's report that this does not necessarily mean any decrease in the number of medical graduates, because more careful selection will doubtless decrease the number of students who fail to complete their course because of poor scholarship.

TABLE 1

Schools, Students and Graduates in the United States—1905-1938

Year	No. Schools	Students*	Graduates
1905	160	26,147	5,606
1910	131	21,526	4,440
1915	96	14,891	3,536
1920	85	13,798	3,047
1921	83	14,466	3,186
1922	81	15,635	2,520
1923	80	16,960	3,120
1924	79	17,728	3,562
1925	80	18,200	3,974
1926	79	18,840	3,962
1927	80	19,662	4,035
1928	80	20,545	4,262
1929	76	20,878	4,446
1930	76	21,597	4,565
1931	76	21,982	4,735
1932	76	22,135	4,936
1933	77	22,466	4,895
1934	77	22,799	5,035
1935	77	22,888	5,101
1936	77	22,564	5,183
1937	77	22,095	5,377
1938	77	21,587	5,194

*Includes figures for schools offering preclinical courses.

NEGRO STUDENTS AND SCHOOLS

There were 372 Negro medical students and 66 graduates in the United States and Canada during 1937-1938. A study is being made by the Council of the Negro physicians in the United States by state and county from the data included in the 1938 edition of the American Medical Directory. A total of 3,392 Negro physicians are listed in the directory.

The only medical school for Negro youth, Meharry Medical College matriculated 206 students and had 35 graduates. At Howard University College of Medicine, Washington, D. C., they comprise a majority of those in attendance and for the 1937-1938 session 121 students of a class of 131 and 18 of the 22 graduates were Negroes. All other schools (six) graduated eight, including one at Ohio State University College of Medicine. In 18 schools in the United States, exclusive of Meharry and Howard, 40 Negro students were enrolled, including one in Western Reserve Uni-

TABLE 2

Graduates of Faculties of Medicine Abroad Examined—1930-1937

Year	Number Examined	Passed	Percentage Failed
1930	167	92	44.9
1931	158	91	42.4
1932	182	96	47.3
1933	200	129	35.5
1934	285	170	40.2
1935	437	303	30.7
1936	588	382	35.0
1937	919	636	30.7

versity School of Medicine and four in Ohio State University College of Medicine.

ABOUT FOREIGN GRADUATES

Table 2, showing the number of graduates of foreign medical faculties (representing both American and foreign born physicians) examined by licensing boards in the United States in eight years and the percentage failing, is of interest. In addition to the figures given, a number have those who began the study of medicine in 1930 are returning to the United States to practice. The figure also includes many refugees from Germany and Austria.

OHIO HOSPITALS HAVING APPROVAL

Of the 729 Hospitals in the United States approved for intern training, 41 are located in Ohio. Table 3 contains interesting information concerning each of these hospitals and their

TABLE 3

Name of Hospital	Location	Control	Capacity	Classification of Patients Percentage			Total Patients Treated	Type of Internship	Number of Interns	Length of Service in Months	Service Commences	Affiliated Service	Outpatient Service	Autopsy Percentage	Salary per Month
				Free	Part Pay	Full Pay									
City Hospital	Akron	NPAssn	366	30	7	63	9,422	Rotating	12	12	July	(76)	Req	45	$22
Peoples Hospital	Akron	NPAssn	156	20		80	4,071	Rotating	4	12	July	(76)	Req	28	$25
St. Thomas Hospital	Akron	Church	185	20	40	40	4,730	Rotating	4	12	July	No	None	30	$20
Aultman Hospital[1]	Canton	NPAssn	171	19	56	25	3,867	Rotating	4	12	July	(77)	None	27	$50
Mercy Hospital	Canton	Church	230	28		72	6,515	Rotating	4	12	July	No	Req	32	$25
Bethesda Hospital	Cincinnati	Church	239	25	30	45	5,933	Rotating	7	12	July	(78)	Req	16	$25(e)
Christ Hospital	Cincinnati	Church	352	4	41	55	7,520	Rotating	9	12	June	(78)	Req	28	$22.50
Cincinnati Gen. Hospital[1]	Cincinnati	City	925	87	10	3	15,834	Rotating	40	12	July	(79)	Req	52	No
Deaconess Hospital	Cincinnati	Church	175	5	41	54	4,282	Rotating	6	12	July	(80)	Req	19	$25
Good Samaritan Hospital	Cincinnati	Church	550	5	66	29	10,708	Rotating	14	12	June	No	None	19	$15
Jewish Hospital[1]	Cincinnati	NPAssn	262	20	44	36	5,713	Rotating	8	12	July	(81)	None	26	$20
St. Mary's Hospital	Cincinnati	Church	252	60	31	9	4,851	Rotating	6	12	July	No	None	18	$25
City Hospital[1]	Cleveland	City	1,579	97	2	1	14,482	Rotating	36	12	July	No	Req	43	No
Fairview Park Hospital	Cleveland	Church	109	16	2	82	3,093	Rotating	5	12	July	No	Req	25	$30-50
Lutheran Hospital	Cleveland	Church	137	5	40	55	4,255	Rotating	4	12	July	No	None	25	$25(e)
Mount Sinai Hospital[1]	Cleveland	NPAssn	270	20	11	69	8,270	Rotating	11	12	July	No	Op	28	$10
St. Alexis Hospital	Cleveland	Church	220	23	1	76	4,591	Rotating	8	12	July	(82)	Req	40	$10
St. John's Hospital	Cleveland	Church	214	18	5	77	5,579	Rotating	6	12	July	No	None	21	$10(w)
St. Luke's Hospital	Cleveland	Church	391	18	1	81	11,302	Mxr&Str	41	12-24	1-g	No	Req	28	No
St. Vincent Charity Hosp.	Cleveland	Church	295	35	1	64	5,879	Rotating	12	12	July	(82)	Req	40	No
University Hospital[1]	Cleveland	NPAssn	916	35	5	60	18,469	Rotating	18	12	July	No	Req	57	(x)
Woman's Hospital[1]	Cleveland	NPAssn	110	6	11	83	2,098	Rotating	3	12	July	No	None	29	$25
Grant Hospital	Columbus	NPAssn	333	8	47	45	6,639	Rotating	8	12	July	No	None	21	$25
Mount Carmel Hospital	Columbus	Church	225	20	30	50	4,385	Rotating	6	12	July	(83)	None	33	$25
St. Francis Hospital	Columbus	State	160	71	16	13	2,988	Rotating	8	12	July	(84)	None	29	$125 yr.
Starling Loving University Hospital[1]	Columbus	State	288	35	23	42	5,289	Rotat&Str	10	12&24	July	No	Req	50	(y)
White Cross Hospital	Columbus	Church	271	12		88	7,003	Rotating	6	12	July	No	None	32	$25
Good Samaritan Hosp.[1]	Dayton	Church	248	36	10	54	4,425	Rotating	4	12	July	No	None	26	$25
Miami Valley Hospital	Dayton	NPAssn	375	23	34	43	10,465	Rotating	8	12	July	(85)	None	40	$25
St. Elizabeth Hospital	Dayton	Church	400	29	32	39	7,105	Rotating	6	12	July	No	None	23	$25
Huron Road Hospital[1]	E. Cleveland	NPAssn	256	2	22	76	6,977	Rotating	9	12	July	No	Req	34	$20
Mercy Hospital	Hamilton	Church	300	25	50	25	3,376	Rotating	2	12	July	No	None	22	$25
Springfield City Hospital	Springfield	City	298	34	29	37	4,960	Rotating	6	12	July	No	Req	18	$30
Flower Hospital	Toledo	Church	130	4	30	66	2,988	Rotating	3	12	July	No	None	32	$25-30
Lucas County General Hospital	Toledo	County	315	100			4,398	Rotating	10	12	July	No	Req	25	$25
Mercy Hospital	Toledo	Church	140	23	72	5	3,070	Rotating	4	12	July	No	None	33	$25
St. Vincent's Hospital	Toledo	Church	354	29	34	37	11,286	Rotating	11	12	July	No	Req	30	$25
Toledo Hospital	Toledo	NPAssn	275	5	58	37	3,793	Rotating	5	12	July	No	None	28	$25
Women's and Children's Hospital	Toledo	NPAssn	150	6	71	23	2,576	Rotating	3	12	July	No	None	24	$25
St. Elizabeth's Hospital	Youngstown	Church	289	3	41	56	6,682	Rotating	7	12	July	No	None	15	$20(e)
Youngstown Hospital	Youngstown	NPAssn	430	25	23	52	9,919	Rotating	14	24	July	No.	Op	20	$20-35

Explanatory references: Abbreviations—NPAssn—Nonprofit Association; Req—required; op—optional; [1] Women interns admitted; (e) bonus of $60; (w) bonus of $30; 76—Children's Hospital, Akron, pediatrics; 77, Molly Stark Sanatorium, Canton, tuberculosis, Massillon State Hospital, Massillon, psychiatry; 78, Children's Hospital, Cincinnati, pediatrics; 79, Hamilton County Tuberculosis Sanatorium, Hamilton County Home and Chronic Disease Hospital, Cincinnati; 80, Longview State Hospital, Cincinnati, psychiatry; 81 Cincinnati General Hospital, pediatrics, otolaryngology; 82, St. Ann's Maternity Hospital, Cleveland; 83, Children's Hospital, Columbus, pediatrics; 84, Starling Loving University Hospital, Children's Hospital, Columbus, obstetrics, pediatrics; 85, Stillwater Sanatorium, Dayton, tuberculosis.

been periodically licensed without examination—by endorsement of their credentials, which is equivalent to licensure in this country. In 1937, 237 were so registered. It was pointed out in the report that since this table makes no differentiation between United States citizens and those foreign born, it may be assumed that some of facilities for training interns. The terms used in the column "Type of Internship" are defined as follows: (1) Rotating internships include services in medicine, surgery, pediatrics, obstetrics and in the clinical and X-ray laboratories; (2) straight internships are limited to a single field, and (3) mixed internships are those comprising

more than one service but which do not include all of the six branches which constitute a rotating internship.

SATISFACTORY FOR RESIDENCIES

Ohio hospitals approved for residencies in specialties are: **Communicable Diseases**, City Hospital, Cleveland. **Dermatology and Syphilology**, Cincinnati General Hospital; City Hospital and University Hospitals ,Cleveland. **Gynecology**, University Hospitals, Cleveland; and Starling Loving University Hospital, Columbus. **General Medicine**, City Hospital, Akron; Cincinnati General Hospital, Deaconess Hospital, Good Samaritan Hospital and Jewish Hospital, Cincinnati; City Hospital, Mount Sinai Hospital, St. Alexis Hospital, St. John's Hospital, St. Luke's Hospital and University Hospitals, Cleveland; Starling Loving University Hospital, Columbus; St. Elizabeth's Hospital, Youngstown; and Miami Valley Hospital, Dayton. **Psychiatry**, Cincinnati General Hospital and Longview State Hospital, Cincinnati; City Hospital, Cleveland; Toledo State Hospital; and Harding Sanatorium, Worthington. **Obstetrics**, Cincinnati General Hospital; City Hospital, Mount Sinai Hospital, St. Ann's Maternity Hospital, St. John's Hospital, St. Luke's Hospital and University Hospital, Cleveland; and Miami Valley Hospital, Dayton. **Obstetrics-Gynecology**, Huron Road Hospital, E. Cleveland. **Ophthalmology**, Cincinnati General Hospital; City Hospital and University Hospitals, Cleveland. **Orthopedic Surgery**, Cincinnati General Hospital; Mount Sinai Hospital and University Hospitals, Cleveland. **Otolaryngology**, Cincinnati General Hospital; City Hospital, St. Luke's Hospital and University Hospitals, Cleveland. **Pathology**, Cincinnati General Hospital; City Hospital, Mount Sinai Hospital, St. Luke's Hospital, St. Vincent Charity Hospital and University Hospitals, Cleveland; Miami Valley Hospital, Dayton. **Pediatrics**, Children's Hospital, Akron; Children's Hospital, and Cincinnati General Hospital, Cincinnati; St. Vincent Charity Hospital and University Hospitals, Cleveland; Children's Hospital, Columbus. **Radiology**, Cincinnati General Hospital and Jewish Hospital, Cincinnati; City Hospital and University Hospitals, Cleveland. **General Surgery**, City Hospital and St. Thomas Hospital, Akron; Mercy Hospital, Canton; Cincinnati General Hospital, Deaconess Hospital, Good Samaritan Hospital, Jewish Hospital, Cincinnati; City Hospital, Mount Sinai Hospital, St. Alexis Hospital, St. John's Hospital, St. Luke's Hospital, St. Vincent Charity Hospital, University Hospitals, and Huron Road Hospital, Cleveland; Starling Loving University Hospital, Columbus; Miami Valley Hospital, Dayton; St. Elizabeth's Hospital, Youngstown. **Tuberculosis**, Hamilton County Tuberculosis Sanatorium, Cincinnati; City Hospital, Cleveland; Sunny Acres, Cleveland Tuberculosis Sanatorium, Warrensville. **Urology**, City Hospital and University Hospitals, Cleveland; Starling Loving University Hospital, Columbus. **Thoracic Surgery**, City Hospital, Cleveland. **Anesthesia**, Huron Road Hospital, East Cleveland.

Schools approved for the training of clinical laboratory technicians include the following in Ohio: Institute of Pathology, Western Reserve University, Cleveland; Mt. Sinai Hospital, Cleveland; Starling Loving University Hospital, and White Cross Hospital, Columbus; College of Mount St. Joseph-on-the-Ohio, Mount St. Joseph, Youngstown Hospital, Youngstown, and Huron Road Hospital, East Cleveland.

County societies throughout the state are compiling summaries of Form No. 1, the individual physician's report in the A.M.A. Survey of Medical Care. If you want your experience and suggestions to be reflected in the summary, complete the form and send it to the person designated in your society IMMEDIATELY.

O. S. U. Clinics Will Be Held on Campus, Nov. 19

Ohio State University College of Medicine announces its annual clinics and homecoming on the morning of the Ohio State-Michigan football game, Saturday, November 19.

The new out-patient, dispensary and contagious disease wing, attached to the Starling Loving University Hospital, completely equipped and running, will be open for inspection to alumni and visitors.

The College of Medicine of Ohio State University is beginning its 105th year of medical instruction. The old clinic on East State Street in connection with St. Francis Hospital was occupied over eighty years ago by the Starling Medical College, an antecedent of the present Medical School and Hospital on the University Campus. All of the out-patient departments are now connected with the University Hospital and its laboratories.

Dr. J. H. J. Upham, dean of the College, and Dr. Russel G. Means, chairman of Post-Collegiate Assemblies, cordially invite all Ohio physicians to attend the clinical demonstrations and ward walks beginning at 9:00 A.M., and concluding at noon, Saturday, November 19, at University Hospital, Columbus.

FUNDAMENTAL FACTORS IN A SUCCESSFUL DISTRICT MEETING

Report of Sub-Committee on District Meetings, Containing Pertinent Suggestions on Planning and Conducting Medical Gatherings

Editor's Note: Although the following report was prepared by the Sub-Committee on District Meetings, after considerable personal investigation on the part of committee members, especially for the information and use of district society officers, it contains many valuable suggestions which can be applied by those in charge of arrangements for all types of medical meetings. For that reason it is presented for the benefit of county society officers and local program committees, as well as members who some day may become officers or program committeemen.

* * *

MEETINGS held and arranged for the Ohio State Medical Association residing in the respective Councilor Districts are important phases of the general postgraduate educational activities of the Association.

Believing that such meetings should be encouraged and should receive the active assistance and cooperation of the State Association as an organization and of individual members residing in the various districts, the Sub-Committee on District Meetings of the Committee on Education has made a rather intensive study of such meetings during the past 12 or 18 months for the purpose of obtaining information as to how such meetings are being conducted and to formulate suggestions and recommendations for stimulating interest in and strengthening these educational gatherings.

Based on its observations, the committee has prepared this memorandum, which it hopes will be of some help to district Councilors and district society officers in arranging for future district meetings.

This report has been divided into three main sections, each dealing with what the committee considers a fundamental factor of a successful district meeting, namely: Physical Arrangements, Program, and Promotion.

PHYSICAL ARRANGEMENTS

1. Place of Meeting.

Because of the size of most of the Councilor Districts, it is virtually impossible to hold meetings in a location which will be convenient to all parts of the district. Therefore, **the committee recommends that Councilors and district society officers consider the possibility of rotating district meetings throughout the district, as has been done by some district societies,** thereby giving the entire membership an opportunity to attend such meetings without great inconvenience. In each district there are several cities having appropriate facilities to handle such a meeting. This should not be overlooked and the advantages of rotating meetings among these cities should be considered. In selecting a place of meeting the essentials enumerated in paragraph 2 of this section should be kept in mind.

2. Meeting Hall and Facilities.

Availability of a meeting hall having adequate seating capacity, proper ventilation, and good acoustics is highly important. The hall should be centrally located with adequate parking facilities nearby, if possible. Preparations always should be made to handle a maximum crowd. Seats for everyone should be provided. If possible, the meeting hall should have a lounge or anteroom where those in attendance can gather before the meeting and during recesses. Unless the hall is properly ventilated, the audience will not be attentive and will become restless. **Good acoustics are most important. If the acoustics of the hall are bad a portable microphone should be installed for the use of the speakers.**

Arrangements for darkening the room when slides or motion pictures are being shown should be made. Obviously, the room should have proper electrical connections for the lanterns and movie machines.

Incidentally, the committee has observed that **church auditoriums have proved the least satisfactory for meetings of this character.** School auditoriums and auditoriums of certain fraternal organizations are satisfactory if they are not too large. Naturally, selection of the meeting hall must depend somewhat on the anticipated attendance.

Location of the speakers' platform is important. If possible, it should be in a central location and where speakers will not be disturbed by late arrivals. Equipment such as reading table, reading lamp, pointer, blackboard and chalk, screen for slides in addition to the microphone, should be provided.

Registration of those attending is desirable. A registration table should be established in the lobby of the meeting hall where those attending may register, obtain programs, secure information, etc.

3. Time of Sessions.

The question of when the meeting or various sessions of the meeting should be held is one for local determination. In some districts, sessions are held in the morning and afternoon with a luncheon intervening. In others, the meeting is held in the afternoon and evening with a dinner

intervening. Some districts open their meetings with a dinner and have an evening session. Preference of members in the district should be considered in deciding this point.

Long sessions are undesirable. Recesses between addresses should be scheduled. The meeting might be held on a day when it is customary for most of the physicians in the district to declare a "half holiday" so that there will be no direct conflict with office hours and regular practice. **Sessions should be started promptly and, if possible, the time schedule in the program should be carried out.**

4. **Local Committees.**

Proper or improper care of local details can make or break a district meeting. Therefore, it is quite essential that competent and alert local committees be selected for the handling of physical details. A meeting cannot progress smoothly and without complications unless the physical arrangements have been taken care of.

Appointment of a local reception committee is highly desirable. This committee should be given the responsibility of meeting and providing accommodations for the guest speakers and to welcome those attending the meeting. **Efforts should be made to see that all attending get better acquainted and are made to feel at home while at the meeting. A good presiding officer is essential.** Any program is certain to drag unless the chairman instills a little pep into the meetings and endeavors to carry out the time schedule set up in the program. Speakers should be properly introduced and, if possible, information concerning them should be presented to the audience by the presiding officer.

PROGRAM

Speakers invited to talk at district meetings should be men of recognized professional standing, who have had experience in making practical talks on timely medical subjects. **A district meeting is not the place for a weighty discussion of ultra-scientific questions and of complicated research problems. Diagnosis and treatment are the points which the speakers should emphasize.** Any man can "read a paper" but he is not the type which should be used on a district meeting program. Only physicians of proved speaking ability should be chosen. It takes experience for a speaker to present the kind of coherent, understandable talk which will hold attention and send those who listened on their way feeling that the trip was worth while. If speakers of this caliber are selected, the "extremely lackadaisical and monotonous atmosphere characterizing many present-day meetings"—an observation made by one member of this committee—can be avoided.

Some of the district societies have made a habit of using out-of-state speakers; others have presented excellent programs and have attracted good attendance by using Ohio physicians. Some of the district societies have used the Speakers Bureau of the State Association to good advantage. The committee has no definite recommendations to make on this matter as, here again, the question is largely one of local determination. However, it is felt that the ideal program is one which makes use of both out-of-state and Ohio speakers. Ohio has much splendid medical talent and it should be taken advantage of wherever possible. At the same time, the use of some outstanding clinician from outside the state occasionally will have a tendency to attract some physicians who otherwise might not attend the meeting and benefit from the other addresses made by Ohio colleagues.

The type of program, the committee has found, varies according to local custom. Some district societies have been quite successful in presenting a program somewhat as follows: Three outstanding speakers, each representing a different specialty, each scheduled for two addresses, with three addresses in the afternoon and three in the evening; dinner intervening. Of course, this setup could be varied by having three addresses in the morning and three in the afternoon with lunch intervening; or four addresses in the afternoon and two in the evening with dinner intervening. Six 45 minute talks with 15 minutes for discussion seems to be about the maximum for the average one-day meeting.

In some localities preference has been expressed for a large number of 10 or 15 minute talks instead of a fewer number of longer addresses. This plan has the advantage of permitting the scheduling of a greater number of local men on the program. Where possible, dry and wet clinics should be scheduled as they will add variety to the program but, obviously, the use of clinics depends largely on the location of the meeting.

Alert district society officers know best what type of meeting the physicians of the district prefer and they should make every effort to arrange a program which will meet with the favor of a majority of the physicians of the district.

Some districts hold golf tournaments in connection with the district meeting. This has not proved very satisfactory, so far as the meeting itself is concerned. If the golf tournament is held on the day of the meeting, the net result usually is that there is delay in getting the meeting started, or attendance at the meeting suffers because of the length of time consumed by some of the golfers in playing the 19th hole. **The committee would not wish to discourage the holding of golf tournaments, but it is suggested that the tournament be held at a time when it will not seriously conflict with the meeting proper.**

PROMOTION

No matter how excellent a program is arranged, or how adequate the physical arrange-

ments, it is obvious that **the attendance at any district meeting will be poor unless the meeting is properly publicized and the urge to attend developed throughout the district.** This is not such a complicated task as is generally believed.

In the first place, the date of the meeting should be set early enough to allow sufficient time for preparing publicity and promotion. If the dates of all district meetings could be decided early in the year, a permanent box could be carried in *The Ohio State Medical Journal*, announcing the times and places of the meetings, and such announcements could be continued in a prominent place for several months prior to such meetings. Also, if the district society officers would promptly transmit information about such meetings to the State Headquarters Office, detailed articles relative to the program and the arrangements could be published in *The Journal* several times prior to the meeting.

Secondly, interest in the meeting can be tremendously stimulated by a direct mail campaign. At least one, and probably two, announcements should be sent directly to all members in the district. The routine of addressing envelopes and mailing announcements can be handled readily by the State Headquarters Office and that office always is at the service of district society officers. An effective procedure would be to send a preliminary announcement to each member in the district a few weeks prior to the meeting. To attract attention, it should be sent by first-class mail. A postal card reminder should be sent a few days before the meeting. Perhaps this procedure could be reversed and a postal card announcing the meeting could be sent several weeks before the date of the meeting, and a week or so before the meeting a program and more detailed announcement could be mailed to all members.

There is considerable advantage in newspaper publicity. Efforts should be made to get news releases about the meeting into all newspapers in the counties in the district. Press releases are more likely to be published if handed to local newspapers by local physicians. Therefore, it is desirable to have a district committee on arrangements consisting perhaps of the secretaries of the county medical societies of the district. This district committee could handle the press releases and also be made responsible for boosting the meeting in the various counties through written notices to members, announcements at county society meetings, or telephone calls.

MISCELLANEOUS SUGGESTIONS

In conclusion, the committee desires to present the following general comments:

It can be seen readily that the success of a district meeting depends pretty largely on the initiative and aggressiveness of the district society officers. For that reason, **the Sub-Committee on District Meetings recommends more consideration than has been customary to the matter of electing such officers.** Too often district society officers are selected in a prefunctory manner and without careful thought as to their qualifications for promoting and handling an important meeting of this kind. Despite the rather slipshod method used in selecting district society officers, most of the districts have been fortunate in having officers who are alert and active. Nevertheless, we believe that improvements can be made in the methods used in selecting such officers and that this point deserves more careful consideration than has been given to it in the past.

In order to promote and stimulate interest in the district meetings, and to assist the various districts in holding the kind of meetings which will be beneficial to the membership, the State Association for the past three or four years has been contributing financially to the various Councilor Districts. An amount consisting of $200 for each district has been set aside annually by The Council to assist the district societies in meeting the expense of one or more district meetings.

There is no disposition on the part of the State Association to dictate how such meetings shall be conducted. However, The Council of the State Association believes that the money contributed to the district societies should be expended wisely and should not be used for activities which have no direct connection with the meeting. In order to clarify this matter, The Council, at its meeting on May 10, 1938, adopted the following resolution, which is incorporated in this report for the information of district society officers and others who may be called upon in the future to handle details in connection with district meetings:

"Use of the annual subsidy, provided by the State Association for the Councilor Districts, shall be restricted to expenses incurred in obtaining speakers for the scientific program, for promotional work; and for providing adequate facilities for district meetings."

The committee hopes that some of the suggestions made in this report will be helpful. It realizes that many of the recommendations are elementary and that most of the district society officers are quite familiar with the necessary arrangements for a successful district meeting. Nevertheless, the committee sees no harm in emphasizing the fundamental points enumerated above and believes, if such points are taken into consideration in the planning of district meetings, such meetings will continue to be of great benefit to a large number of members of the State Association.

This committee is anxious to assist the district society officers whenever it can do so, and wel-

comes suggestions and advice which can be relayed from time to time to the various districts.

Respectfully submitted,

WM. KELLEY HALE, *Chairman*,
G. A. WOODHOUSE,
J. L. WEBB,
PAUL J. FUZY,
C. E. HUFFORD.

Fifth Annual Postgraduate Day at Toledo University, Oct. 28

The Fifth Annual Postgraduate Day of the Medical Institute of the University of Toledo, will be held on Friday, October 28, at the University. This program is provided from the proceeds of a trust fund established by the last Board of Trustees of Toledo Medical College in memory of Dr. J. H. Jacobson, who was the first Councilor of the Third District of the Ohio State Medical Association; first president of the Academy of Medicine of Toledo and Lucas County, and one of the five physicians who founded the present Academy Building.

The lecturers will be Dr. Louis E. Phaneuf, professor of gynecology, Tufts College Medical School, Boston, Mass., and Dr. John A. Toomey, associate professor of pediatrics, Western Reserve University School of Medicine, Cleveland.

The morning program will begin at 10 o'clock with a lecture on "The Treatment of Meningeal Irritations", by Dr. Toomey, followed by a discussion of "The Significance of Menorrhagia and Metrorrhagia", by Dr. Phaneuf. Topics to be presented at the afternoon session, beginning at 2 o'clock are: "Evaluation of Specific Vaccine and Serums in Prophylaxis and Treatment of Contagious Diseases", by Dr. Toomey and "Pelvic Infection in Women", by Dr. Phaneuf.

Dinner will be served at 6:00 P.M., followed by a round-table discussion from 7:00 to 8:00 P.M.

Two lectures will be given at the evening session beginning at 8 o'clock, "The Management of Acute Contagious Diseases and their Complications", by Dr. Toomey, and "The Management of Uterine Prolapse", by Dr. Phaneuf. Chairmen of the sessions will be Dr. F. M. Douglass, Dr. E. B. Gillette and Dr. John T. Murphy.

There is no registration fee for the lectures. Reservations for the dinner must be made in advance with George W. Cooley, executive secretary of the Toledo Academy of Medicine, Monroe at Fifteenth St., Toledo.

All Ohio physicians are cordially invited to attend the meeting.

Gallipolis—As chairman of the McIntyre Memorial Committee, Dr. C. E. Holzer, is trying to have Postmaster General Farley issue a commemorative stamp during 1939 bearing the likeness of the late O. O. McIntyre.

Fall Meeting of Eighth District To Be Held at Granville Inn, Oct. 27

The Autumn meeting of the Eighth Councilor District of the Ohio State Medical Association will be held at the Granville Inn, Granville, Thursday, October 27, with the Licking County Medical Society as host.

The following program has been arranged:

9:00 A.M.	Golf at Granville Inn Golf Course
1:00 P.M.	Complimentary luncheon at Granville Inn
2:30 P.M.	Scientific session
6:00 P.M.	Dinner
7:00 P.M.	Scientific session.

Additional details concerning the meeting will be announced to physicians in the district later. Officers of the district society are: Dr. George A. Gressle, Newark, president; Dr. Donald R. Sperry, Newark, secretary, and Dr. Edmund R. Brush, Zanesville, Councilor.

Postgraduate Day at Canton

All Ohio physicians are cordially invited by Dr. George N. Wenger, Massillon, president, and Dr. Clair B. King, Canton, secretary of the Stark County Medical Society, to attend the society's First Annual Postgraduate Day, which will be held at the Courtland Hotel, Canton, Wednesday, October 12.

Speakers will be a group of physicians from the faculty of the University of Pennsylvania School of Medicine, Philadelphia. They are: Dr. T. Greer Miller, professor of clinical medicine; Dr. I. S. Ravdin, professor of surgery; Dr. Floyd E. Keene, professor of gynecology, and Dr. Baldwin Lucke, professor of pathology. Dr. J. Edwin Purdy, Canton, is chairman of the committee which is making arrangements for the meeting.

Inter-State Postgraduate Assembly

The Twenty-Third International Assembly of the Inter-State Postgraduate Association of North America will be held in the public auditorium, Philadelphia, Pa., October 31, November 1-4. Hotel headquarters will be the Benjamin Franklin Hotel. The registration fee is $5. Hotel reservations may be made through Thomas E. Willis, chairman of the Hotel Committee, Chamber of Commerce Building, 12th and Walnut Sts., Philadelphia. Dr. George W. Crile, Cleveland, president-elect of the Association, is chairman of the program committee. A copy of the program and detailed information concerning the meeting may be obtained by addressing Dr. William B. Peck, managing-director, Freeport, Illinois.

Do You Know - - -

Nine of the 17 members of the Union County Medical Society attended the opening session of the Ohio State Medical Association Regional Postgraduate Lectures at Dayton, Wednesday evening, September 7.

* * *

Dr. Warren F. Draper, assistant surgeon general, U. S. Public Health Service, Washington, D. C., has been appointed executive officer of the service, a newly created position. He will be succeeded as assistant surgeon general by Dr. Paul M. Stewart, who for the past three years has been medical director of the U. S. Employees Compensation Commission.

* * *

To further the anti-syphilis campaign in Indiana, blood tests are now required of all employees in the State Department of Welfare, the State Unemployment Compensation Division and the State Employment Service.

* * *

Successful methods of pellagra treatment and prevention developed by members of the research staff of the University of Cincinnati College of Medicine will be reported by Dr. Tom D. Spies, associate professor of medicine, at the Third United International Congress of Tropical Medicine and Malaria scheduled to meet at Amsterdam, Holland, September 24 to October 1.

* * *

One of the papers read at the 25th anniversary meeting of the Canal Zone Medical Society at Gorgas Hospital, September 14, was prepared by Dr. Howard V. Dutrow and Dr. A. G. Farmer, Dayton. Dr. Farmer served 10 years in the Panama Canal Zone and Dr. Dutrow seven years. The latter was secretary of the society a number of times and was first to receive life membership in the organization.

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Coal-tar dyes used in the production of cosmetics, drugs and foods must be submitted by their manufacturers to the United States Department of Agriculture for certification under the new Food, Drug and Cosmetic Act.

* * *

Medical facilities being arranged by the Department of Medicine and Public Health of the New York World's Fair 1939, include 10 first aid stations on the grounds, a large corps of physicians and surgeons, nearly 100 nurses, 10 motor ambulances and a "mobile X-ray truck to speed to the scene of any accident to make pictures of any injury as quickly as possible", according the Fair's press agent.

Seventy-four out of 800 applicants for admission to this year's freshman class of Western Reserve University School of Medicine were accepted. They come from 15 states and 44 have college degrees.

* * *

At a recent meeting of the Ohio Society of Old Age Pensioners, among the resolutions adopted was a proposal that the state provide hospital service for recipients of old age pensions.

* * *

The week of October 2 will be "birth registration week" in West Virginia. An intensive educational campaign is being sponsored by the State Health Department in cooperation with the United States Bureau of the Census to impress citizens with the importance of providing all children with birth certificates. Birth registration each year in West Virginia is only about 85 per cent complete.

* * *

Dr. Ben R. McClellan, Xenia, former President of the Ohio State Medical Association, has initiated a movement to erect a shrine in memory of Dr. John Hole, Revolutionary War physician, who was the first to practice in Dayton and the Miami Valley, between 1799 and 1804. Dr. Hole died January 6, 1813, and is buried in the old township cemetery near Centerville, where it is proposed to erect the memorial.

* * *

The blind population of the United States is 114,000, a ratio of 90 per 100,000 inhabitants.

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Dr. John H. Norris, Fostoria, was one of the original 28 subscribers when telephone service was started in that city 56 years ago. Dr. Norris has practiced medicine for 61 years.

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Dr. Herbert B. Wright, Cleveland, is the president-elect of the Aeronautical Medical Association of the United States.

* * *

According to statisticians of the Metropolitan Life Insurance Company, the women in our population live on an average about four years longer than men. Based on figures for 1936, the average length of life for white males is 60.18 and that for white females 64.36, as against corresponding figures of 60.72 years and 64.72 years in 1935. This represents an average improvement of 11.57 years since 1901, when the expectation of life at birth was 49.24 years.

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From seven to ten per cent of marriages are reputed to be sterile.

THE VENEREAL DISEASE CAMPAIGN IN COLUMBUS, OHIO

By LOUIS J. ROTH, M.D., COLUMBUS, OHIO

Editor's Note: Many cities through Ohio are carrying on organized campaigns in an effort to prevent and eradicate venereal diseases. Other cities are contemplating such campaigns. To provide physicians who may be actively interested in this program with information as to how one Ohio city—Columbus—is conducting its venereal disease campaign, *The Journal* presents this article by Dr. Louis J. Roth, who headed up the Columbus program, based on an address which he made before the Eighth District Society Meeting at McConnelsville, Ohio, on June 23, 1938.

* * *

WITHIN the last three years public and professional interest in the control and treatment of venereal disease has become so widespread that many communities have adopted effective measures to combat this evil. The City of Columbus was quick to respond to the need for an educational campaign, and with the cooperation of the Community Fund and the Columbus Board of Health, an active campaign against venereal diseases was inaugurated in the Spring of 1937.

Most cities have conducted intensive campaigns of two to four weeks' duration, with the hope that the momentum of such a campaign would sustain itself until another drive would take place. The Columbus campaign, however, has been conducted with more emphasis on continuity—the efforts of education through various channels being continued throughout the year. Two nurses were appointed to follow up delinquent cases of syphilis, as well as trace possible sources of infection, while the publicity and the organization of the educational campaign were allotted to me, as part-time director of the campaign.

OBJECTIVES ENUMERATED

Some of the objectives of this campaign are to inform the public:

THAT syphilis and gonorrhea are dangerous communicable diseases, but that these diseases may be prevented and avoided.

THAT early diagnosis and treatment are highly important for infected persons,

THAT prolonged and continuous treatment is essential to cure or arrest syphilis,

THAT danger lies in resorting to quacks or to drugstore treatment,

THAT a suspicion of infection should be verified or dismissed by a physician, or if indigent, at the Dispensary.

AND, finally, what actually constitutes reliable treatment, with safety and comfort to the patient.

VARIOUS GROUPS COOPERATED

The campaign was endorsed by the Columbus Academy of Medicine, the Chamber of Commerce, and the District Nurses Association. The newspapers were avid for information concerning syphilis and its manifestations. A series of articles were published with headlines such as: "Education needed in fight against venereal diseases." "Syphilis outranks other diseases as enemy of mankind." "Treatment surest way of defeating venereal disease," etc.

The importance of any educational campaign against venereal disease lies in the number of patients it is instrumental in bringing under treatment. To determine whether the campaign is successful it is necessary to know approximately how many cases are being treated or are under observation on any given day before the campaign is under full swing. In order to ascertain this the Board of Health reached every physician in Columbus and the doctors were 100 per cent cooperative in reporting the number of venereal disease patients under their care.

It was learned that 3,614 cases of venereal disease were under treatment or observation, 53 per cent of these cases under the care of private physicians, the remaining 47 per cent cared for by the public clinics or hospitals. For every 1,000 persons in Columbus, 12 are being treated for venereal disease. This rate is approximately the same as surveys have shown in other cities, with Baltimore having 13.3 cases, Cleveland 11.7 cases, and Detroit 11.5 cases per 1,000.

A survey of this kind always represents the minimum prevalence of venereal disease, due to the fact that we know that numerous diseased persons do not take any treatment, while many persons have syphilis but are unaware of it, and many others go to quacks or to drugstores for alleged treatment. In a survey of drugstores in the city of New Orleans it was found that approximately 3,400 requests were made monthly for advice, remedies or treatment for syphilis and gonorrhea.

NEWSPAPER PUBLICITY

In the first three months of our campaign eight articles appeared in the newspapers, two 15-minute radio interviews presented the subject of syphilis control for the first time over a local station, the talking slide picture "For All Our Sakes" was shown to about 1,500 persons, and hundreds of pamphlets were distributed. Large posters were placed in all the rest rooms of the leading industrial plants. The two nurses assigned to follow up delinquent cases made 1,173 visits to homes of venereal disease patients. Proof that the follow-up, plus the educational and pub-

licity campaign were fruitful was definitely revealed by the unusual increase of new patients at the clinic during these three months, as compared to the same three months of the previous year. In April the increase of new patients was only 23 per cent, by May it leaped to 84 per cent and June found an unprecedented increase of 136 per cent.

RADIO CAMPAIGN

It was not, however, until the Fall that our forces were fully organized. Forty leading physicians readily accepted the invitation to form a speakers' bureau. A radio campaign over one of the leading stations was inaugurated by a representative minister, a rabbi and the City Welfare Director. Every week thereafter, for 15 weeks, a prominent physician broadcast a ten-minute lecture on some phase of syphilis, and the newspapers printed liberal excerpts from these talks. In addition, one of the newspapers, for two successive Sundays, devoted a whole page to the subject of syphilis, disclosing the prevalence, the symptoms, the dangers and the modern methods of treatment.

It is well known that the success of any advertising campaign depends on repetition of easily digested material. It was with this idea in mind that a series of twenty short case histories was prepared.

SAMPLE CASE HISTORIES PUBLISHED

These appeared in an evening newspaper once or twice a week, a sample of which is as follows:

"Instead of looking forward to celebrating his 15th wedding anniversary Mr. N. was seriously considering applying for a divorce. His wife's constant complaining and growing irritability made life at home seem like living on a volcano.

"He could not understand the marked change that had come over her. It was hard to believe that this unstable nervous condition was due to her frequent headaches, from which she found no relief after she got those well-advertised glasses at a downtown store. In self-defense he took her to a doctor.

"Examination revealed a condition of the eye very suggestive of syphilis, and blood and spinal tests gave convincing evidence of the presence of this disease.

"The denouement recalled with excruciating vividness a period in Mr. N's youth when his mental anguish outweighed the pain of a tiny lingering sore that was healed after a month's treatment.

"Mr. N. insisted on a thorough physical examination, including blood and spinal tests, and it was found he had syphilis of the nervous system even though it had not actively manifested itself. Mr. N's impatience with his wife made a turn-about-face and he did everything in his power to compensate for the affliction he had unknowingly caused.

"Treatment was instituted at once and after a time Mrs. N's headaches, irritability and temper tantrums were gone. The irony of the situation was that Mrs. N's condition brought to light her husband's quiescent syphilis, which made it possible for him to be cured before complications arose.

"This is another example of disastrous results of insufficient treatment of early syphilis. There are no short cuts in the treatment of this disease. Unnecessary suffering could have been avoided had a clean bill of health been required before marriage."

Letters from the public to the editor commenting favorably on this series of case histories were published in later editions of the same newspaper.

MOVIES A GREAT AID

One of the greatest aids in disseminating information during this campaign has been the showing of the slide talkie film mentioned above. This picture has been shown to groups totalling approximately 7,000 people, 70 per cent of whom were women. A physician always accompanies this film and he gives a short talk and answers questions following its showing. Usually the question period lasts about 15 minutes. The amount and character of the questions seem to be directly proportionate to the intelligence of the audience and inversely proportionate to the classes that need the information most. Invariably the question is asked: "Isn't it true that the negro race is infected more than the white race?" Whether this question arises from the desire to show one's knowledge, or whether the feeling of superiority is heightened by the knowledge that some other race is a more frequent victim of this disease, I do not know. It causes surprise, therefore, to have it brought out that the sharecroppers of Georgia and other groups of poor-whites have as high an incidence rate of syphilis as that of the colored race. This serves to emphasize the urgent need for education among our so-called forgotten men, women and children. It is ofttimes discouraging to talk before groups whose economic status never permitted much education, but the apathy and inarticulateness is soon recognized as part of this lack of education and merely stimulates the speaker to a greater effort. Proof that this educational effort has been productive of results is shown by the fact that the venereal clinic maintained an increase of 32 per cent in new cases over last year, whereas the medical clinic only showed an increase of 2 per cent.

As stated before, the majority of the audiences was made up of women—a group 50 per cent of whom are innocently infected and are usually ignorant of their infection. If it were possible to reach groups of illiterate men as easily as women, this campaign would be fruitful of even greater results. However, the majority that we have spoken to has been above the average intelligence. One-third of the groups addressed were in their own churches, and it was heartening to encounter such frank and intelligent discussion of a hitherto tabooed subject. Particularly

did the junior mixed groups of the churches conduct their discussion in a straightforward and dignified manner.

PREDICTION AS TO FUTURE

There are some physicians who remember the emphasis that was made on venereal disease control after the war. The fuse sputtered and died. Many are of the opinion that the same thing will happen this time. Perhaps I am a born optimist, but the forces at work today predict a continued and aggressive fight. Three states recently passed laws making blood tests before marriage compulsory. Many states are prepared to follow. The word syphilis has lost its sinful connotation and education is rapidly disintegrating the stone wall that Mrs. Grundy once built around this formerly forbidden word.

In the last two years magazines and newspapers have had innumerable articles on syphilis. Most of these articles were informative without being sensational. Even magazines which do not carry cigarette advertisements have printed articles on syphilis. Certainly these are not straws in the wind; they are brick and mortar.

Perhaps there will be some syphiliphobes develop. If you rid the syphiliphobiac of this phobia, this type of person usually adopts some other pet hallucination. Better ten syphiliphobes than one congenital syphilitic!

Dr. Thomas Parran tells us that 1,000,000 potential mothers in the United States now have or have had syphilis, and it is, therefore, not surprising that women have shown the greatest interest in our campaign. Most men's groups outside of the church have been loath to listen to anything about the subject of syphilis. Perhaps men have a greater sense of false modesty. Perhaps they are greater sentimentalists and do not like to hear of the havoc this disease has wrought. We all realize and admit that women are much more practical. They see clearly that here is a problem that vitally concerns them and those around them. A million mothers potential syphilitics; 60,000 congenitally syphilitic babies every year. Is there any other subject that will arouse a greater response? These are not mere statistics, they are a definite challenge.

The parent-teachers' associations and many women's clubs have accepted this challenge—and I feel that the women of this country will play a major part in the ensuing battle.

Youngstown—Winners in the annual interns' contest conducted by the Mahoning County Medical Society, were Dr. Densmore Thomas—first prize for a paper on "Trichiniasis", and Dr. Don A. Miller, second prize, for a case report on "Stab Wound to the Left Side of the Chest". The prizes were $15 and $10 respectively.

If you want a bigger Ohio State Medical Journal, with more clinical papers and more news features, it can be done—with your help. The size of your Journal depends largely on the amount of advertising revenue. Present advertisers will continue to use our pages, if you use their products, and tell their detail-men that you saw their advertisement in your Journal. Ask the detail-man representing a company which does not advertise, "Why not?" Remind him that the circulation of The Ohio State Medical Journal is the largest in its history; that 6,000 Ohio physicians receive a copy each month; and that a great majority are reading it from-cover-to-cover each month.

Re-Registration Law Purges Ohio Relief Load of 10,000 Cases

More than 10,000 cases were cut from Ohio's poor relief rolls between August 1 and September 17 at a saving estimated to exceed $2,102,400 a year, according to a recent statement of State Auditor Joseph T. Ferguson.

The 10,000 represent ineligibles weeded out by 66 counties in compliance with the present poor relief law which requires re-registration of relief clients every three months.

Counties which have failed to report to the state relief administrator on re-registrations are being denied state relief grants until their reports are in.

Auditor Ferguson estimated the total saving on the basis of July's average cost of $17.48 per case.

The relief load of the 66 reporting counties was 75,027 when re-registrations began August 1. Of the total, 52,824 were found to be eligible, 10,023 were dropped from the rolls and 12,180 cases are pending. The relief load for the entire state in July was 103,067 cases. In addition, approximately 271,000 persons are on W.P.A.

Cleveland—The following physicians have been named to the medical executive board of St. John's Hospital: Dr. R. K. Updegraff, Sr., chief of medicine; Dr. C. L. McDonald, chief of staff; Dr. C. A. O'Connell, vice chief; Dr. G. P. O'Malley, director of surgery; Dr. R. J. Schraff, secretary; Dr. J. V. Heimann and Dr. J. T. Collins.

IN MEMORIAM

Frank Clifford Ard, M.D., Westfield, N. Y.; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md., 1887; aged 75; died August 23. Dr. Ard formerly practiced in Pomeroy. He retired in 1932 after specializing in eye, ear, nose and throat in Westfield for many years. His widow survives.

Elizabeth Bartos, M.D., Cleveland; Western Reserve University School of Medicine, Cleveland, 1924; aged 40; member of the Ohio State Medical Association and Fellow of the American Medical Association, died August 14. Born in Budapest, Hungary, Dr. Bartos came to this country after two years in the medical department of the Royal Hungarian University. She practiced in Cleveland for 14 years. Surviving are her parents and a sister.

Lloyd M. Bell, M.D., Pataskala; Toledo Medical College, 1885; aged 79; died August 16. After practicing in Pataskala for nearly 50 years, Dr. Bell retired three years ago because of ill health. He was a member of the Odd Fellows Lodge. His widow, a son and two daughters survive.

Otis Little Cameron, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1886; aged 76; former member of the Ohio State Medical Association and the American Medical Association; died August 21. Dr. Cameron was coroner of Hamilton County from 1904 to 1908 and assisted in teaching bacteriology at the Ohio Medical College for a number of years. He was well known for his surgical drawings and received the Dawson gold medal for work in that line. Dr. Cameron was active in Y.M.C.A. affairs and was a member of the Masonic Order. His widow and a daughter survive.

William Curtis Cross, M.D., Ashtabula; Cleveland University of Medicine and Surgery, 1896; aged 67; died September 7. Dr. Cross retired a few years ago, after having practiced in Ashtabula for nearly 40 years. His widow and a son survive.

Clarence Starr Cutter, M.D., Cleveland; Cleveland Medical College, Homeopathic, 1894; aged 71; died August 19. Dr. Cutter practiced in Cleveland for 45 years. He was a member of the Masonic Order. Surviving are his widow, a daughter and a son—Dr. Laurence S. Cutter, Cleveland.

Charles A. Hall, M.D., Cleveland; Cleveland University of Medicine and Surgery, 1888, and Cleveland College of Physicians and Surgeons, 1899; aged 75; former member of the Ohio State Medical Association and the American Medical Association, and Fellow of the American College of Surgeons; died August 19. Dr. Hall practiced in Cleveland for more than 50 years. For 30 years he was chief surgeon for the Wheeling and Lake Erie Railroad Company. He was a member of the staff of St. John's Hospital for many years. His widow and a son survive.

Lloyd L. Hall, M.D., Youngstown; Baltimore Medical College, 1902; aged 63; member of the Ohio State Medical Association and Fellow of the American Medical Association; died August 1. After having been located in Blacksville, W. Va., for 11 years, Dr. Hall came to Youngstown in 1914. Surviving are his widow, a daughter, two sons—one of whom is Dr. J. C. Hall, Youngstown, five sisters and two brothers.

Frank Wallace Hendley, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1885; aged 78; former member of the Ohio State Medical Association and the American Medical Association; died September 12. Dr. Hendley was medical director of the Cincinnati Mutual Life Insurance Company. He had a distinguished career as an officer in the Medical Corps of the United States Army, having served in that capacity in the Spanish-American War, the Mexican border disorders and the World War. In March, 1919, he was placed in command of the hospital at Camp Sheridan, Ala. From 1920 to 1932 he was medical officer and member of the claims board of the U. S. Veterans' Bureau. Dr. Hendley retired from active government service in 1932, two years after his retirement from private practice. He was an active member of the Masonic Order.

Wilber J. James, M.D., Excelsior Springs, Mo.; Eclectic Medical College, Cincinnati, 1894; aged 70; member of the Missouri State Medical Society and Fellow of the American Medical Association; died August 13. Dr. James practiced in Blanchester and Leesburg for several years, and for the past 30 years had been located in Missouri. A sister and a brother survive.

Hiram Benjamin Martin, M.D., Huntington, W. Va.; Eclectic Medical College, Cincinnati, 1905; aged 57; member of the West Virginia State Medical Society and the American Medical Association; died August 23. Dr. Martin was a brother of Dr. George W. Martin, who died in Portsmouth several years ago, and was a member of a family in which there were six physicians. Surviving are his widow, a daughter, two sisters and three brothers—Dr. Ira N. Martin, Portsmouth, Dr.

Harry P. Martin, Newark, and Dr. Albert B. Martin, Blanchester.

John Francis Morgan, M.D., Joplin, Missouri; Columbus Medical College, 1881; aged 83; died September 3. Dr. Morgan practiced in Jackson for 20 years, later locating in Colorado and Missouri. Surviving are three daughters, two sons, and several sisters and brothers, including Dr. Everett H. Morgan and Dr. Richard T. Morgan, Marion.

Robert Wayne Nosker, M.D., Columbus; Ohio State University College of Medicine, 1917; aged 44; member of the Ohio State Medical Association and Fellow of the American Medical Association; died August 26. Dr. Nosker practiced in Columbus for 20 years. He was a member of the staffs of White Cross, Grant, Children's and St. Francis hospitals. During the World War, he was a lieutenant in the medical corps of the U. S. Army. Dr. Nosker was a member of the First Community Church, Masonic Order, American Legion, B.P.O.E., Lions Club, and Phi Rho Sigma. Surviving are his widow, two sons, his father, a sister and a brother.

Granville B. O'Roark, M.D., Grayson, Ky.; Kentucky School of Medicine, Louisville, Ky., 1890; aged 77; member of the Kentucky State Medical Society and the American Medical Association, and former member of the Ohio State Medical Association; died August 19, Dr. O'Roark practiced in Grayson, Ky., and in Portsmouth for 44 years, retiring June 1 because of failing health. He was a member of the Masonic Order and the Methodist Church. Surviving are five daughters, and two sons—one of whom is Dr. H. C. O'Roark, Portsmouth.

Richard Ellwood Peteferd, M.D., Springfield; Ohio Medical University, Columbus, 1906; aged 55; member of the Ohio State Medical Association and the American Medical Association; died July 29. A resident of Springfield for 32 years, Dr. Peteferd was a member of the Ohio Medical, Dental and Pharmaceutical Association—statewide organization of colored professional men. He was a trustee of the Wiley Methodist Church and the Y.M.C.A. His widow, a sister and a brother survive.

Harrison Christian Riegel, M.D., Hampton, Va.; University of Illinois College of Medicine, Chicago, 1905; aged 61; former member of the Ohio State Medical Association and the American Medical Association; died August 5. After 15 year's practice in Lightsville, Dr. Riegel was on the staff at the Lima State Hospital for several years. He later practiced at Richmond, Ind., before moving to Virgina. Surviving are his widow and two daughters.

William A. Shira, M.D., LaRue; Bellevue Hospital Medical College, New York, N. Y., 1877; aged 92; died August 24. Dr. Shira practiced in Meeker for five years, moving to LaRue in 1881. He retired from active practice several years ago because of ill health. A daughter, two sons—one of whom is Dr. Donald D. Shira, Columbus, and two brothers survive.

Henry Harrison Smith, M.D., Oxford; Medical College of Ohio, Cincinnati, 1883; aged 76; member of the Ohio State Medical Association and the American Medical Association; died September 9. A member of one of Butler County's pioneer families, Dr. Smith had been in active practice for 55 years, of which 35 years was spent in Oxford. Prior to that time he had been located in Okeana, Ohio, New Orleans, La., and Reilly Township, Ohio. Dr. Smith was the first president of the board of trustees of Fort Hamilton Hospital, Hamilton. One of his hobbies was harness racing, and he was returning from the Montgomery County Fair at Dayton, where several of his horses were entered in races, when he was fatally injured in an automobile accident. During the World War, Dr. Smith was named honorary captain of the Student Army Training Corps at Miami University. He was an active member of the Masonic Order. Surviving are his widow, a son—Dr. Parke G. Smith, Cincinnati, President-Elect of the Ohio State Medical Association, two sisters and a brother.

Clarence Snyder, M.D., Arcadia; University of the South, Medical Department, Sewanee, Tenn., 1894; aged 67; member of the Ohio State Medical Association and the American Medical Association; died August 7. Dr. Snyder practiced in Arcadia for ten years. His widow, two sisters and three brothers survive.

Joseph LeRoy Stevens, M.D., Dayton; University of Cincinnati College of Medicine, 1932; aged 39; member of the Ohio State Medical Association and the American Medical Association; died July 31. Dr. Stevens was killed in an automobile accident. He had practiced in Dayton for six years. Surviving are a stepson, a stepdaughter, his parents, a sister and a brother.

Jerome Josephus Stout, M.D., Dayton; Ohio Medical University, Columbus, 1902; aged 61; member of the Ohio State Medical Association and the American Medical Association; died August 25. Dr. Stout practiced in Athens County for three years prior to locating in Dayton, where he was in general practice for 33 years. He was a member of the Presbyterian Church, Masonic Order, Junior Order of American Mechanics and the Woodmen of the World. Surviving are his widow, a daughter, two sons and a brother.

Edwin A. Swan, M.D., St. Petersburg, Fla.; University of Michigan Medical School, Ann Arbor, 1875; aged 83; died August 16. After several years in Michigan, Dr. Swan practiced in

Bellefontaine and Lima for 30 years. He was a member of the Presbyterian Church. A son and a daughter survive.

Richard S. Wilson, M.D., Willshire; Fort Wayne College of Medicine, 1891; aged 82; former member of the Ohio State Medical Association and the American Medical Association; died August 14. Dr. Wilson retired several years ago after having practiced in Willshire and vicinity for 22 years. He had previously practiced in Upland, Indiana, and Ross County, Ohio. He was a member of the Lutheran Church, the Knights of Pythias and Red Men fraternal orders. Surviving are his widow, a son and two daughters.

COMING MEETINGS

Ohio State Medical Association, Toledo, May 3-4, 1939.

American Medical Association, St. Louis, May 15-19, 1939.

Academy of Physical Medicine, Washington, D. C., Oct. 24-26.

American College of Surgeons, New York, Oct. 17-21.

American College of Physicians, New Orleans, March 27-31, 1939.

American Congress of Obstetrics and Gynecology, Cleveland, Sept. 11-15, 1939.

American Public Health Association, Kansas City, Oct. 25-28.

Associated Anesthetists of the United States and Canada, New York, October 17-21.

Association of Military Surgeons of the United States and Canada, Rochester, Minn., Oct. 13-15.

Central Association of Obstetricians and Gynecologists, Minneapolis, Oct. 13-15.

Central Society for Clinical Research, Chicago, Nov. 4-5.

Clinical Orthopedic Society, Nashville, Tenn., and Birmingham, Ala., Oct. 7-8.

Interstate Postgraduate Assembly, Philadelphia, Oct. 31-Nov. 4.

Open New Offices

Among physicians who have recently opened new offices in Ohio are the following: Dr. Troy McCune, Sebring; Dr. Alton W. Behm, Chardon; Dr. Paul Conrad, Leetonia; Dr. Vernon A. Noble, Jr., Lima; Dr. H. M. Bertling, Rock Creek; Dr. L. A. Hamilton, Athens; Dr. Ronald B. Kieffer, Napoleon; Dr. David E. Sauer, Marietta; Dr. R. L. Tecklenberg, Lima; Dr. Louis A. Vogel, Glandorf; Dr. R. E. Cooke, Harrison; Dr. Herman B. Kaufman, Philo; Dr. Thomas E. Byrne, Mentor; Dr. Bernard B. Rosenblatt, Peninsula; Dr. T. V. Gerlinger, Attica; Dr. I. E. Treece, Arlington; Dr. W. Ray Swango and Dr. J. D. Swango, Ironton; Dr. Paul Overs, Spencer.

Novel Plan for Medical Care of Lucas County Indigent Suggested

The Council of The Toledo Academy of Medicine has been working on a plan for medical care of the indigent, with the Commissioners of Lucas County. It calls for the payment of a definite sum of money per year into a corporation chartered by the state for charitable and scientific purposes only. Allocation of the money would be decided by the Board of Trustees of the proposed corporation, this board to be selected by the physicians of Lucas County.

Commenting on the proposal, the September, 1938, issue of *The Bulletin of the Toledo Academy of Medicine* has the following to say:

"It must be understood that this sum of money is not in payment for individual services to members of the Staff of Lucas County Hospital or of any other hospital but rather it is an "**honorarium**" granted by the Board of County Commissioners and the people of Lucas County to the medical profession in appreciation and recognition of the medical services which have been and are now being carried on for the benefit of those persons unable to pay. It must be fully understood that any payment to individual physicians for these services would be a burden too great for the County to bear, ranging approximately between $250,000 and $1,000,000 annually. It must be fully understood that this amount, $24,000, annually is an amount **suggested by the County Commissioners themselves** and not an amount arbitrarily demanded by the profession. It must be fully understood that this money is not to be used for the benefit of any individual physician. It may be used at the discretion of a Board of Trustees, elected as mentioned above. It may be used for the scientific betterment of the profession, that is, to bring to Toledo prominent men in all fields of medicine for lectures, post graduate courses, and clinics. It may be used to increase the facilities of the medical library. It may be used for the education of the public in matters of health, that is, by providing funds for radio programs, newspaper publicity, hygiene courses, and health classes and courses of instruction of various types in the industrial and retail establishments. It is to be used to help to correlate two great factors; the scientific knowledge of the physician and the medical needs of the people."

Conference on Rural Medicine

A Conference on Rural Medicine will be held at The Mary Imogene Bassett Hospital, Cooperstown, New York, Friday and Saturday, October 7 and 8. The program has been divided into four general subjects: rural morbidity; health department programs and school health programs in rural areas; postgraduate medical education in rural areas; and economics of rural medicine. Dr. M. A. Blankenhorn, Cincinnati, is a member of the advisory committee which arranged the conference. An address on "Medical Care for Rural America" will be made by Dr. R. G. Leland, Chicago, director of the Bureau of Medical Economics of the American Medical Association.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

FAYETTE

At a meeting of the Fayette County Medical Society, Thursday, September 8, at the Cherry Hotel, Washington C. H., Dr. F. V. Meriwether, medical consultant for the Farm Security Administration, gave a very interesting talk on the problem of providing medical care for clients of the Administration. The Society adopted the Logan County plan for medical relief of these clients. A committee was appointed to investigate the general relief situation in Fayette County. Dr. L. Howard Schriver, Cincinnati, Councilor for the First District, was present and gave a short talk.—James F. Wilson, M.D., secretary.

HAMILTON

At the opening meeting of the 1938-1939 year of the Academy of Medicine of Cincinnati, Dr. Charles D. Heisel gave the address of the retiring president and Dr. Richard S. Austin was inaugurated as president for the ensuing year.—Bulletin.

WARREN

Dr. E. M. Huston, Dayton, former President of the Ohio State Medical Association, was the principal speaker at a meeting of the Warren County Medical Society, Tuesday afternoon, September 8, at the Town Hall, Lebanon. Andrew Gruber, member of the State Auditor's staff, described the existing setup for care of the indigent sick.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

GREENE

An interesting lecture on "Acne" was given by Dr. Charles J. Shepard, Columbus, at a meeting of the Greene County Medical Society, Thursday, September 1, at Xenia. All members were urged to attend the Regional Postgraduate Lectures being presented by the Ohio State Medical Association at Dayton and Springfield. Attention was called to the September issue of *The Ohio State Medical Journal*, and every member urged to read it carefully.—Donald F. Kyle, M.D., secretary.

MIAMI

Dr. John T. Quirk, Piqua, spoke on "Cardiac Neuroses: Diagnosis and Treatment", at a meeting of the Miami County Medical Society, Friday afternoon, September 2, at Stouder Hospital, Troy.—G. A. Woodhouse, M.D., secretary.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

HANCOCK

"Medical Economics" was the subject of an informal discussion, lead by Dr. B. F. Mowry, at a meeting of the Hancock County Medical Society, at the Elks' Club, Findlay, Saturday noon, August 6.—News clipping.

MARION

Dr. Wayne Brehm, Columbus, gave a very interesting talk on "Modern Obstetrics" at a well-attended meeting of the Marion Academy of Medicine, Tuesday, September 6, at the Marion City Hospital.—R. G. McMurray, M.D., secretary.

SENECA

The annual social meeting of the Seneca County Medical Society for members and their wives was held at Lake Mohawk, Tiffin, Thursday afternoon and evening, September 8.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

WOOD

"Medico-Legal Aspects of Malpractice" was the subject discussed at a meeting of the Wood County Medical Society, Thursday evening, September 15, at Pierce's Restaurant, Bowling Green.—R. N. Whitehead, M.D., secretary.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

Dr. Alton Ochsner, New Orleans, La., professor and director of the Department of Surgery, Tulane University of Louisiana School of Medicine, spoke on "The Management of Peripheral Vascular Disease", at a meeting of the Academy of Medicine of Cleveland, Friday evening, September 16, at Medical Library Auditorium.—Bulletin.

GEAUGA

On July 24, members of the Geauga County Medical Society were guests of Dr. Henry J. John, Cleveland, at his camp for diabetic children, "Ho Mita Koda", to which children come from all parts of the United States for a month of recreation under most careful scientific super-

vision. Dr. John gave a valuable lecture on diabetes and his method of treating it. Children in the camp entertained the society with dances and drills and unveiled a new totem pole, which one of the youngsters christened with fluid from a bottle labeled "Insulin". Geauga County is very proud to have Dr. John and his camp in its midst.

Dr. G. R. French was host to the society August 24 at his delightful farm home in South Burton. Following a number of case reports, a social time was enjoyed with the host and Mrs. French.—Isa Teed Cramton, M.D., secretary.

LORAIN

Dr. Barney J. Hein, Toledo, President of the Ohio State Medical Association, spoke on "Recent Trends in Medical Economics" at a meeting of the Lorain County Medical Society, Tuesday evening, September 13, at the Hotel Antlers, Lorain. —L. H. Trufant, M.D., secretary.

Sixth District

(COUNCILOR: W. M. SKIPP, M.D., YOUNGSTOWN)

ASHLAND

A dinner meeting of the Ashland County Medical Society was held at the Hotel Otter, Ashland, Wednesday, September 21. Following a business session, members of the society went to Mansfield to attend the second session of the Ohio State Medical Association Regional Postgraduate Lectures.—M. D. Shilling, M.D., secretary.

MAHONING

"Sulfanilamide" was the subject of an address by Dr. Perrin H. Long, Baltimore, Md., associate professor of medicine, Johns Hopkins University School of Medicine, at a meeting of the Mahoning County Medical Society, Tuesday evening, September 20, at the Youngstown Club, Youngstown.—Bulletin.

PORTAGE

At a meeting of the Portage County Medical Society, Thursday evening, September 8, at the Robinson Memorial Hospital, Ravenna, Dr. E. N. Collins, Cleveland, spoke on "Diseases of the Colon".—E. J. Widdecombe, M.D., secretary.

STARK

Dr. Emery R. Hayhurst, Columbus, spoke on "Some Experiences in Tracking Down Occupational Diseases", at a meeting of the Stark County Medical Society Thursday evening, September 8, at the Elks' Club, Canton.—Clair B. King, M.D., secretary.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

CARROLL

Dr. J. D. Stires, Malvern, entertained the members of the Carroll County Medical Society with a steak fry at his home, Thursday night, September 1.—Carl A. Lincke, M.D., secretary.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

FAIRFIELD

"Cancer" was the topic discussed by Dr. Wm. B. Morrison, Columbus, at a meeting of the Fairfield County Medical Society, Tuesday noon, August 9, at Lancaster.—News clipping.

PERRY

Dr. George C. Malley, Zanesville, spoke on "Epilepsy" at a meeting of the Perry County Medical Society, at the Park Hotel, New Lexington, Thursday noon, August 18.—News clipping.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

At a meeting of the Columbus Academy of Medicine, Monday evening, September 19, at the Columbus Gallery of Fine Arts, Dr. Charles A. Doan spoke on "Recent Advances in the Understanding, Differential Diagnosis and Treatment of the More Common Anemic States", and Dr. Bruce K. Wiseman discussed "Recent Advances in the Diagnosis and Therapy of Thrombocytopenic Purpura".—Bulletin.

ROSS

"The Medical Aspects of the Farm Security Administration" was the subject discussed by Dr. Ralph V. Meriwether, Indianapolis, Indiana, regional medical consultant for the F.S.A., at a meeting of the Ross County Medical Society, Thursday evening, September 1, at the Chillicothe Country Club.—News clipping.

New Hospital Wing About Ready

The new $250,000 wing to Starling Loving Hospital of Ohio State University College of Medicine, Columbus, is expected to be ready for occupancy October 1. It will replace the dispensary operated at St. Francis Hospital and the isolation department now housed in the old army barracks on the University campus. Of the total cost, $195,400 was furnished by W.P.A. and $62,120 by the University.

Purpose of the new four-story wing is to centralize the hospital's several medical and clinical services under one roof. The dispensary will be located on the three lower floors, with the isolation ward occupying the fourth floor.

Toledo—Dr. E. J. McCormick, Toledo, Grand Exalted Ruler of the Benevolent and Protective Order of Elks, was honor guest at the annual banquet of the Ohio State Elks' Association held at Cedar Point.

Mortality Record in Ohio Shows Big Improvement in 18 Years

In a recent report, I. C. Plummer, chief of the Division of Vital Statistics, State Department of Health, presented some interesting figures demonstrating the improvement in Ohio's mortality record since 1920—the year before the present public health laws in the state became operative.

While the population of Ohio increased 25.3 per cent in the past 18 years (approximately 1,500,000 persons), there were only 3.5 per cent more deaths filed in 1937 than in 1920, Mr. Plummer pointed out.

Other significant comparisons mentioned follow:

In 1920, every 128th mother died in childbirth; in 1937, every 213rd mother made this sacrifice. A great saving in lives has been recorded in children under one year of age. Every 12th child born in 1920 never lived to have a birthday; today one child out of 20 dies during the first year of life.

Every 12th death that occurred in the state in 1920 was due to tuberculosis, and in 1937 every 24th death was caused by some form of the disease. Forty-two per cent of all deaths in Ohio in 1920 was among school children between the ages of 5 and 19; in 1937 only 33 per cent of the deaths was in this group.

In five familar causes of death in 1920 there were 3,013 deaths and in 1937 only 737, a decrease of 75 per cent. The names and percentages of decreases are as follows: typhoid fever, 67 per cent; scarlet fever, 66 per cent; diphtheria, 83 per cent; measles, 86 per cent and whooping cough, 64 per cent.

Mr. Plummer attributed this great saving in life to the efforts of the medical profession, and the improvement in public health programs since the passage of the Hughes-Griswold Act in 1919.

Physicians Married

Recent marriages of Ohio physicians include the following: Miss Florence Spiedel and Dr. James K. Ashburn, Batavia; Miss Thelma Juanita Carey and Dr. Charles W. Matthews, New Vienna; Miss Ellen Chatham and Dr. Robert E. Heinle, Cleveland; Miss Mildred Bryan and Dr. Charles W. Barch, Columbus; Miss Margaret Adams and Dr. Michael J. Sunday, Youngstown.

Licensed Through Reciprocity

The following physicians have been licensed by the State Medical Board, through reciprocity, to practice medicine and surgery in Ohio: Dr. Burt N. Coers, Circleville, University of Tennessee College of Medicine; Dr. Reginald A. Hancock, Columbus, University of Pittsburgh School of Medicine, and Dr. James R. Reeves, Columbus, Indiana University School of Medicine.

Cleveland—Dr. L. F. Hall, deputy health commissioner of Cuyahoga County, has been appointed health commissioner of Lewis and Clark County and Helena, Montana.

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2. An approved course in physical therapy of not less than nine months, following graduation from a school of nursing or physical education which meets the requirements of the individual states.

These requirements have been approved by the Council on Medical Education and Hospitals of the American Medical Association. The object in having these qualifications for membership is to provide for the hospitals, schools for crippled children, and offices of physicians, trained physiotherapists who are able to follow the physicians' orders intelligently and thoroughly.

One of the purposes of the American Physiotherapy Association is to cooperate with and work only under the prescription of members of the medical profession.

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GYNECOLOGY—Two Weeks Course starting October 10th. Gynecological Pathology by Dr. Schiller starting October 24th.

OBSTETRICS—Two Weeks Intensive Course starting October 24th. Informal Course starting every week.

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Special Board Examinations

American Board of Anesthesiology: An affiliate of the American Board of Surgery. New York, Oct. 21-22. Sec., Dr. Paul M. Wood, 745 Fifth Avenue, New York.

American Board of Dermatology and Syphilology: Written. Various large cities in the country about Oct. 1. Oral. St. Louis, Nov. 11-12. Sec., Dr. C. Guy Lane, 416 Marlboro St., Boston.

American Board of Internal Medicine: Written examinations will be held in various parts of the United States, Oct. 17 and Feb. 20. Application for the October examination must be received before Sept. 15 and for the February examination on or before Jan. 1. Sec., Dr. William S. Middleton, 1301 University Ave., Madison, Wis.

American Board of Obstetrics and Gynecology: Written examination and review of case histories of Group B applicants will be held in various cities of the United States and Canada, Nov. 5. General examination for all candidates (Groups A and B) will be given in St. Louis, May. Applications must be filed not later than sixty days prior to date of examination. Sec., Dr. Paul Titus, 1015 Highland Bldg., Pittsburgh (6).

American Board of Ophthalmology: New York, Oct. 7, and Washington, D. C., Oct. 8. Sec., Dr. John Green, 3720 Washington Blvd., St. Louis, Mo.

American Board of Orthopaedic Surgery: Memphis, Tenn., January. Applications for this examination must be filed with the Secretary on or before Oct. 15. Sec., Dr. Fremont A. Chandler, 6 N. Michigan Ave., Chicago.

American Board of Otolaryngology: Washington, D. C., Oct. 7-8. Sec., Dr. W. P. Wherry, 1500 Medical Arts Bldg., Omaha.

American Board of Pediatrics: Detroit, Oct. 26; Rochester, N. Y., Nov. 13; and Oklahoma City, Nov. 15. Sec., Dr. C. A. Aldrich, 723 Elm St., Winnetka, Ill.

American Board of Psychiatry and Neurology: New York, Dec. 28-30. Sec., Dr. Walter Freeman, 1028 Connecticut Ave. N.W., Washington, D. C.

Speak on Safety Campaign Program

Dr. Barney J. Hein, President of the Ohio State Medical Association, and Dr. Edward J. McCormick, Councilor for the Fourth District, presented a 15-minute radio program recently as part of an intensive one-week safety campaign sponsored by Radio Station WSPD, Toledo. Dr. Hein stressed the importance of industrial safety, and Dr. McCormick based his plea for safe driving on a description of the emergency operating room in a hospital as a motor accident victim is received.

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Organization of the Squibb Institute for Medical Research, in which a staff of scientists assembled from leading institutions of the United States and foreign countries will attack problems involved in the cure of disease and relief of pain, is announced by E. R. Squibb and Sons, The Institute will be housed in a new $750,000 laboratory building in New Brunswick, N. J.

Research activity has been organized in four main divisions—experimental medicine, pharmacology, bacteriology and virus diseases, and organic chemistry. In addition, the Institute will operate a biochemical laboratory and a medicinal chemistry laboratory.

Dr. George A. Harrop, formerly associate professor of medicine in Johns Hopkins University and associate physician of Johns Hopkins Hospital, has been appointed director of research in direct charge of the Institute and head of the Division of Experimental Medicine.

Dr. Harry B. van Dyke will head the Division of Pharmacology. He comes to the Institute from Peiping Union Medical College in China, where he was professor and head of the department of pharmacology. He was also formerly a professor of pharmacology in the University of Chicago.

Dr. Geoffrey W. Rake, former research associate in the Connaught Laboratories of Toronto University, heads the Division of Bacteriology and Virus Diseases. Dr. Rake has also been on the staff of the Rockefeller Institute.

The director of the Division of Organic Chemistry will be Dr. Erhard Fernholz, formerly of the University of Goettingen and Princeton University.

Dr. Hans Jensen, formerly of the Institute of Experimental Biology of the University of California, will be associate in charge of the biochemical laboratory. Dr. Jensen is a former assistant professor of pharmacology at Johns Hopkins.

William A. Lott, formerly instructor in chemistry at Rutgers University, will be associate in charge of the Medicinal Chemistry Laboratory.

A plan of hospital affiliation is being worked out by the Division of Experimental Medicine, under which a free ward of 15 or 20 beds will be maintained for the observation of patients.

Under the direction of the Division of Experimental Medicine, new fellowships in medical schools will be established for the study of cancer, syphilis, and hormones. Other fellowships now sponsored by Squibb and Sons will be continued.

The mechanism of surgical shock is among the researches planned. The value of certain hormone preparations in the treatment of surgical shock is being tested. Another investigation aims to determine the value of vitamin K in checking hemorrhage after operations, and other vitamins.

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cause of infant mortality, is being undertaken by the Division of Bacteriology and Virus Diseases.

Another investigation proceeding in the Division of Pharmacology deals with new chemotherapeutic compounds. The division also will foster research in the field of synthetic medicinal remedies for the treatment of cardio-vascular diseases.

Men of science from all over the country will participate in the dedication of the new laboratory which will take place October 11.

Obstetrics and Gynecology Congress To Be Held in Cleveland in 1939

The American Congress on Obstetrics and Gynecology will be held in Cleveland, September 11-15, 1939. Sponsored by the American Committee on Maternal Welfare, Inc., the purpose of this Congress is to afford opportunities for discussing and publicizing the problems associated with human reproduction and the health of women and new born babies. Medical groups, as well as those devoted to nursing, public health and institutional administration will participate in the program.

National, sectional and local specialist societies have made contributions for the support of the Congress. Contributing memberships costing $5 are solicited. Applications may be made at the office of the Congress, 650 Rush St., Chicago, Ill.

Dr. Fred L. Adair, Chicago, is general chairman of the Executive Committee. Local arrangements for the meeting will be in charge of a committee, of which Dr. W. R. Barney, Cleveland, is chairman.

Open Urological Department

The New York Polyclinic Medical School and Hospital has opened a Urological Department in its new clinic building, under the supervision of Drs. Joseph F. McCarthy, Daniel A. Sinclair, David Geiringer and Howard S. Jeck and their associates.

Cincinnati—Lieutenant Commander W. W. Munsell, naval physician for the Cincinnati district, has been transferred to New York. He will be succeeded by Lieutenant Commander E. B. Oliver, formerly of Raleigh, N. C.

Findlay—"The History of Medicine", was the subject of a talk made by Dr. Norris W. Gillette, Toledo, at a meeting of the Kiwanis Club. Dr. O. P. Klotz, Councilor for the Third District of the Ohio State Medical Association, presided.

Sandusky—An attempt is being made to raise $100,000 by local subscriptions to pay off present indebtedness of $44,000 owed local merchants by Good Samaritan and Providence Hospitals and to purchase new equipment.

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● The years since 1932, when the P-P factor was known variously as vitamin B_2 or G, have been especially marked by contributions to our knowledge of the anti-pellagric vitamin. Considerable progress has also been made in the treatment of human pellagra as well as in the control of the disease. It might be of interest to review briefly a few of the outstanding developments in this field.

The P-P factor is now accepted as being closely related chemically to nicotinic acid if, indeed, it is not identical with that compound (1). Nicotinic acid has been used successfully in the treatment of human pellagra (2) and there is evidence to support the belief that the P-P factor is intimately associated with essential enzyme reactions in the body (3). A laboratory test has been devised for the early clinical detection of pellagra (4) and there is today better agreement as to the basic dietary requirements for the management of florid pellagra (1).

While the situation as regards endemic pellagra has, in general, shown improvement during recent years, an occasional report indicates that endemic pellagra still constitutes a major medical problem in some localities (5). Authorities agree that the old adage relating to an ounce of prevention being the equal of a pound of cure applies particularly well in the case of pellagra. Consequently, in specific regions of this country certain control measures have been advocated in an endeavor to bring this deficiency disease under permanent control. The most promising of these measures are the issuance of yeast rations and popular education to the desirability of home production of foods rich in the P-P factor, especially during late winter and early spring. The problem of permanent control of pellagra has been clearly and briefly defined as follows:

> "The prevention of endemic pellagra is simple in theory but difficult in practice. If every normal person received enough of the foods containing the pellagra-preventive vitamin there would be no endemic pellagra.—Permanent control can be obtained only by bringing about permanent changes in dietary habits" (1).

The correction of those long-standing dietary malpractices which are responsible for pellagra is certain to be brought about only slowly. The concerted and sustained efforts of all agencies concerned with public health will be required, not only to insure observance of the control measures described above, but also to educate the potential pellagrin to the necessity of a varied diet of protective foods.

Commercially, canned foods may play an important part in the current program designed to bring pellagra under control. Several hundred varieties of canned foods are readily available on every American market at all seasons of the year. Judicious inclusion in the diet of those foods known to be important carriers of the anti-pellagric factor (1) should materially assist in effecting permanent control of endemic pellagra in America.

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(1). 1938. J.A.M.A. 110, 1665.
(2). 1938. J.A.M.A. 111, 584.
1938. Ibid. 111, 613.
1938. Ibid. 110, 289.
(3). 1938. J.A.M.A. 111, 28.
(4). 1938. J. Med. Assn. State of Alabama. 8, 52.
(5). 1938. J. Med. Assn. State of Alabama. 7, 475.

This is the forty-first in a series of monthly articles, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research. We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.



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Symptoms of Visceral Disease. A Study of the Vegetative Nervous System in Its Relationship to Clinical Medicine. By Francis Marion Pottenger, A.M., M.D., LL.D., F.A.C.P., professor of clinical medicine, University of Southern California. Fifth Edition. $5.00. C. V. Mosby Company, St. Louis, 1938.

In the twenty years since this book first appeared, the science of physiologic medicine has begun to come into its own and this work played no little part in this reception. It is a stimulating work which each of us should study, and to read it is to study for it is no dogmatic compend to be used as a work of reference.

Physical Exercises for Men. With "Moving Pictures". By R. E. Roper. $1.00. M. S. Mills Company, New York, 1938; pp. 88.

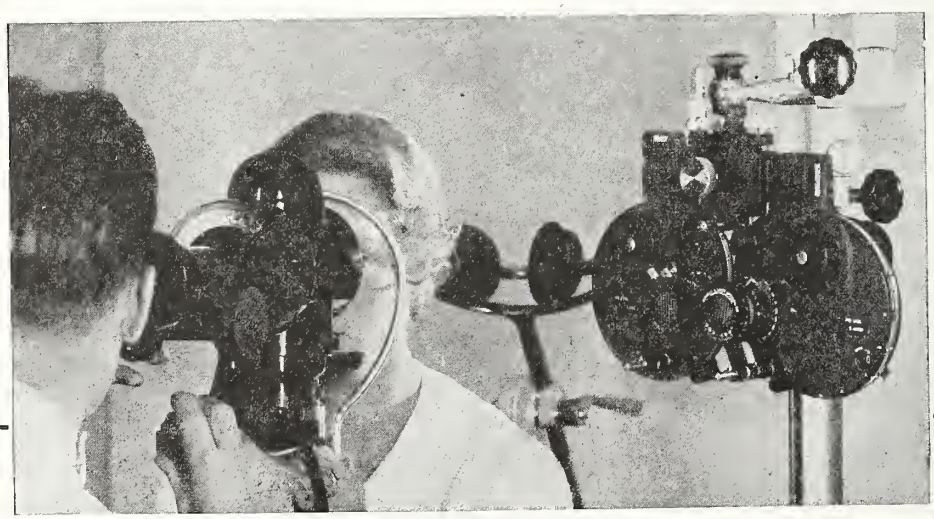
This is one of Mills Sports Series in which under appropriate patents by holding the book in the left hand and flicking over the pages with the right thumb two moving pictures are obtained and when the book is reversed, two more are seen. A happy application of the principles of visual education to the subject.

The Foundations of Nutrition. By Mary Swartz Rose, Ph.D., professor of nutrition, Teacher's College, Columbia University. $3.50. The Macmillan Company, New York, 1938; pp. 625.

The author has written this book for those who wish to live more intelligently. In this she has succeeded. It is a book which will prove valuable reading to most of us and is certainly the best book on the subject which we can put in the hands of our patients.

Dorothea Dix, Forgotten Samaritan. By Helen E. Marshall. The University of North Carolina Press, Chapel Hill. 1937.

This is a story by a capable woman writer of a woman who ranks with America's greatest humanitarians. Dorothea Dix considered the entire world a possible field for endeavors in behalf of the mentally ill. At the expense of being called by many physicians a lay meddler she assigned herself the task of cleaning psychiatry's house in America and later extended her activities from Nova Scotia to Rome. For forty-six years she worked for improvements in prison



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Miss Marshall looks keenly and dispassionately into the life of that type of character which appears now and then to sting humanity out of its smugness and apathy for its own good.—Louis J. Karnosh, M.D.

The Pituitary Gland. An Investigation of the Most Recent Advances. Vol. XVII of a Series of Research Publications of the Association for Research in Nervous and Mental Diseases. Editorial Board, Walter Timme, Angus M. Franz, and Clarence C. Hare. $10.00. Williams and Wilkins, Baltimore, 1938; pp. 764.

This volume by 46 outstanding contributors is a necessity in the library of any one interested in any phase of the subject.

The Sex Life Before and After Marriage. By William S. Sadler, M.D., director of the Chicago Institute for Research and Diagnosis, and Lena K. Sadler, M.D., associate director. Two Volumes, $2.95. American Publishers Corporation, Chicago, 1938; pp. 333.

A complete statement in simple English of those facts which should be known about sex and sexual relations written in an attempt to establish a normal attitude towards those often misunderstood human relations. It is recommended for the purpose for which it was written.

Lengthen Your Life. By Bruce McCann. $1.25. Rodale Press, Emaus, Pa. 1938; pp. 160.

For the most part sound advice which is backed up by testimonials of persons who have lived long. This makes an effective way to teach moderation and the application of common sense in work, sleep, exercise, eating, and worry. In the opinion of the reviewer, the emphasis placed upon a quotation from Montaigne is of the most importance. "The smallest and slightest impediments are the most piercing; and as little letters most tire the eyes, so do little affairs most disturb us."

Successful Living. By W. Béram Wolfe, M.D. $2.00. Farrar & Rhinehart, New York, 1938; pp. 180.

This is a companion volume of the author's "How to Be Happy Though Human". It is directed not only to the maladjusted but also to the normal human confronted by difficulties. While recognizing this thing called destiny, Dr. Wolfe shows increasing belief that human happiness is in the hands of the individual. To your patient who is muddling through, this book will inspire her to develop a plan for her life. This makes for success.

Sexuality in the Second Decade. By Raymond Royce Willoughby. A monograph of the Society for Research in Child Development. Published by the Society in Washington, D. C., 1937; pp. 57.

This review is limited to such factual studies as enable some generalization about adolescent sexuality. As a review of 114 articles and books, it hardly admits of review. It should be in all libraries on sex.

Men Past Forty. By A. F. Niemoeller, A.B., M.A., B.S. $2.00. Harvest House, New York, 1938; pp. 154.

While not a physician, the author is well known for his American Encyclopedia of Sex. The scope of the book is the usual one. Sex organs, impotence, sexual control, prostate gland, aphrodisiacs, rejuvenation, change of life in the male—much information is given about what not to do. Written in a frank manner, but it would seem that the warning not to use, except under guidance of a physician, will not be enough to deter some of the readers from trying some of the large list of testicular preparations listed toward the end of the book. All in all, however, it is a reasonable statement of what is known of the sexual problems of men past forty.

Acta Medica Scandinavica—Solume 93—I. Holmgren, Editor—Stockholm, Sweden. Yearly Subscription $18.00.

Volume 93 consists of six books totaling 626 pages with four supplements comprising nearly 1,500 pages. A year's subscription consists of three such volumes.

This review is intended to point out some of the advantages of this excellent journal. Twenty of the original articles are published in English as are two of the supplements. These include such subjects as: Investigations on the treatment of thyreotoxicosis, Pancreatoxin treatment in diabetes mellitus. The etiology of hepatitis epidemica, gastrographic studies and adminis-

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tration of food through a duodenal tube. The anterior pituitary and its diabetogenic and pancreatropic activity, and significance of precordial leads in electrocardiography in acute myocarditis. Seventeen of the articles and one of the supplements are in German. These include studies on bleeding peptic ulcer, nocturia in liver disease, essential hypertension, and excellent electrocardiographic reports on anemia, acute nephritis and pericarditis. Four of the articles are in French; Un cas d'Insulinorésistance, Une forme spéciale de la lipogranulomatose généralisée, as well as studies on hypertension and splenic puncture A supplement entitled A Fourth Orientation on the Therapeutic Value of an Anti-Leprosy Serum is in English and Spanish. Apart from the very real intrinsic worth of most of the contributions, nearly every article has its conclusions printed in three languages, which has permitted the reviewer to acquire a reading knowledge of medical French and German.—Robert C. Kirk, M.D.

Hernia. Anatomy, Etiology, Symptoms, Diagnosis, Differential Diagnosis, Prognosis and the Operation and Injection Treatment. By Leigh F. Watson, M.D., Los Angeles, Second Edition, $7.50. The C. V. Mosby Company, St. Louis, 1938; pp. 591.

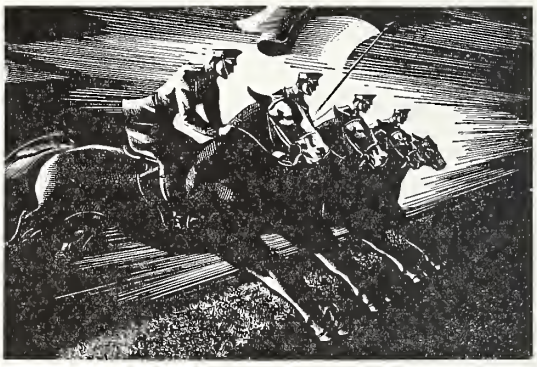
The value of the first edition of this work is well known to all students of hernia. The additional value of this edition is new chapters on the injection treatment and the rewritten medico-legal chapter embracing the latest opinions of insurance carriers and rulings of the state industrial commissions. The author's experience has convinced him of the value of the injection treatment and of its far-reaching economic importance to industry.

Apes, Men, and Morons. By Earnest Albert Horton, professor of anthropology, Harvard University. $3.00. George P. Putnam's Sons, New York, 1937; pp. 307.

Much of this work has appeared as essays in the various journals of opinion. With a keen wit and a sharp tongue, the author presents the scientific consideration of men and their reactions with an understanding. The book is most stimulating and will repay every physician who reads it.

Opium Addicts and Addictions. By John A. Hawkins, M.D. $2.50. Bruce Humphries, Inc., Boston, Mass., 1937; pp. 156.

This is a semi-popular presentation of the experiences of the author with drug addicts. He advocates the complete isolation of addicts as a Federal responsibility. The author discusses the indispensable uses of opium and its ill-advised prescribing. He condemns the ambulatory treatment as entirely impractical. An interesting, informative volume!



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NEWS NOTES

Ashtabula—Dr. William J. McCarthy, past president of the local Exchange Club, told of his recent trip to Austria at a meeting of the Painesville Exchange Club.

Bremen—A fractured leg was sustained by Dr. Max W. Livingston while on a vacation trip in Canada.

Chardon—Dr. Lucy Stone Hertzog spoke on "Socialized Medicine" at a meeting of the Painesville Rotary Club.

Circleville—The Pickaway County board of health has reappointed Dr. A. D. Blackburn health commissioner for two years.

Columbus—Dr. and Mrs. James A. McClure recently celebrated their 58th wedding anniversary.

Coshocton—Work has begun on a $45,000 addition to City Hospital.

Dayton—Dr. H. V. Dutrow, candidate for senator in the Third State Senatorial District, spoke on "Socialized Medicine" at a meeting of the Business and Professional Women's Club.

Elyria—Dr. Leonard H. Harris is the new secretary-treasurer of the Cleveland Allergy Society.

Gallipolis—Members of the Rotary Club were dinner guests of Dr. W. Lewis Brown in celebration of his becoming the father of twins.

Kent—Dr. P. L. Harris, assistant chief, Bureau of Venereal Diseases, State Department of Health, has been appointed health commissioner of Portage County.

Lima—Dr. Fred Maurer spoke on "Heart Disease, Causes and Treatment" at a recent meeting of the Jay County Medical Society, Portland, Indiana.

Mansfield—Dr. Paul E. Baird, assistant city-county health commissioner, has resigned to accept a position on the staff of the veterans' hospital at Asheville, N. C.

Massillon—"Modern Treatment of Tuberculosis" was the subject of an address made by Dr. E. B. Pierce, superintendent of Molly Stark Sanatorium, at a meeting of the Rotary Club.

McGuffey—Dr. J. B. K. Evans has practiced medicine for 50 years—40 years in McGuffey. His father practiced in Williamstown for 50 years and a son, Dr. R. K. Evans, is a physician at Lindsey.

Uhrichsville—Dr. R. E. Wolf has been appointed to the local board of health, to complete the unexpired term of the late Dr. Fred A. Bowers.

Wilmington—Dr. Elizabeth R. Shrieves fractured her right arm in a recent fall.

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Vol. 34 NOVEMBER, 1938 No. 11

PASSIVE PROPHYLAXIS AGAINST ACUTE INFECTIONS IN CHILDHOOD

By JOHN A. TOOMEY, M.D., CLEVELAND, OHIO

THE use of human convalescent serums and specific antitoxins and serums obtained from animal sources has been fairly successful in the treatment of a few acute infectious diseases. For this reason, these therapeutic materials have been recommended for the treatment of nearly every infectious disease. It has now become the custom, not only to treat the patient who is already ill, but also to inject exposed susceptibles with various immune principles in an effort to prevent the occurrence of the disease. The use of serums, especially convalescent serums, has become so common that in many cities "serum centers" or "banks" have been established to meet the demand. In some localities, it is felt that the physician is not quite up to date if he fails to employ passive immunity in his practice. On the other hand, physicians like Peterman[1] believe that more harm than good has been done by the indiscriminate use of convalescent serums. The purpose of this paper is to attempt to evaluate the efficacy of such serums and antitoxins in passive prophylaxis.

What is passive immunity? Does passive immunity modify or prevent an attack of the disease to which an individual has been exposed? How long does passive immunity last? Is it worthwhile to immunize passively and what is its cost? These are practical questions—some easy, some impossible to answer.

Read before the Fourth General Session, representing the Section on Pediatrics, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, May 11 and 12, 1938.

The Author

● Dr. Toomey is a graduate of Western Reserve University School of Medicine, 1919; member American Pediatric Society, American Academy of Pediatrics, Society for Experimental Biology and Medicine, American College of Physicians, American Society of Bacteriology, American Association for the Advancement of Science, American Public Health Association; physician-in-charge, Contagious Disease Hospital; associate pediatrist (contagous diseases) University Hospitals; associate professor, pediatrics (contagious diseases) Western Reserve University School of Medicine.

In passive immunity, the serum of a patient who has recovered from a disease, or the serum obtained from an animal that has been injected with the specific factor causing the disease, is injected into a susceptible person, or one who is ill with the disease, in order to modify the course of the infection or to prevent its occurrence. Such immunity is relatively fleeting. The patient begins to lose it as soon as the injection is completed. All of his temporary protection may be lost within a few weeks and he again becomes susceptible. Theoretically, if the susceptible person has another exposure, he has to be reinjected with the material containing the passive immune

principle. If human convalescent serum and animal antitoxin or antiserum do not modify the course of a disease in any way, the chances that the passive immune principle can prevent the occurrence of the same disease are very slight indeed. The way to determine its value is to observe its effect in the treatment of the disease.

I should like to state here that all injections of passive immune principles mentioned subsequently are made intramuscularly.

In some diseases, the value of the passive immune principle obtained from either human beings or animals has been well established and generally accepted, and need not be reviewed. They are: diphtheria, measles and tetanus.

DIPHTHERIA

The efficacy of the passive immune principle contained in diphtheria antitoxin used to treat patients ill with diphtheria, is so well known that it need only be mentioned in passing. Even though there is no disagreement about the efficacy of the antitoxin in preventing the disease in exposures, the question is: Should individuals exposed to the infection be injected with diphtheria antitoxin? Years ago, when antitoxin was bulky, when from 20 cc. to 30 cc. contained but 10,000 units, when it was not concentrated nor refined and serum sickness was common, there were well-founded objetions to its use. Now, antitoxins are so purified and so concentrated that a few cubic centimeters contain a full therapeutic dose and one no longer worries about bulk. Notwithstanding this, it would seem that the question of giving antitoxin to exposures is one of judgment and of expediency. If the physician cannot regularly see the exposed susceptibles and if a time interval of more than two days elapses between visits, as may happen in country practice, it might be well passively to immunize susceptibles with 2,000 units of diphtheria antitoxin. In city practice, where the patient can be seen daily, such injections are not necessary. Since, so few individuals get diphtheria, even when exposed, and the isolation and prevention of the spread of this disease is so easily accomplished, it would not be bad practice to wait and treat the patient later if he develops signs of the acute disease. The best procedure to follow in protecting children against diphtheria is: (1) do a Schick test to determine susceptibility before they have a chance to get sick, and (2) if found to be positive reactors, actively immunize them with either plain or alum precipitated toxoid.

MEASLES

In 1896, Weisbecker[2] first used human convalescent measles serum to treat individuals ill with this disease. There is so much evidence on passive prophylaxis itself, that its therapeutic effect need not be considered. Cenci in 1901 and 1906[3] first used human convalescent measles serum for passive immunization. The procedure did not become very popular until after the report of Nicolle and Conseil in 1918[4] and the work of Degkwitz in 1920[5]. Later confirmatory work was done by numerous observers [Peterman, 1928[6], Kato, 1928[7], Wesselhoeft and Gordon, 1928[8], Toomey[9], Martmer[10] and others]. Richardson and Jordan in 1927[11] summarized the accepted results. They concluded that (1) convalescent measles serum prevents the disease in 55 per cent of those passively immunized; (2) measles which does occur following passive immunization is usually much milder and associated with fewer complications than is measles without the use of the serum; (3) its use should be confined to children under three or four years of age; (4) infants under six or eight months need not be immunized; (5) the immunity is of short duration; (6) it is of value in institutions and hospitals; (7) serums should be pooled because of the occasional low titer antitoxin value; (8) although it may not prevent all attacks, those who have the disease are not very ill and probably develop permanent immunity. It has been found in England[12] and America[13] that children who have been immunized and have had mild attacks of the disease may later have second attacks.

All workers in contagious disease hospitals believe that if enough convalescent measles serum is injected early enough after exposure, it modifies an attack of the disease and even prevents it in the exposed susceptible. All agree that the weakling or sickly should be protected, but there is no good reason to inject all exposed susceptibles. The objective of passive immunity in measles should be not to prevent the disease, but to modify the attack and establish as much immunity as possible. The immune principle, no matter what its source, is given on the second day of intimate exposure to a member of the family, or on the sixth day after a casual and single outside exposure. The time of exposure is sometimes difficult to determine. Obviously, if the serum is given too late, it will have no effect.

Most practitioners would rather use convalescent serum than convalescent whole blood.

Because convalescent measles serum was not always available and because adults have a solid immunity after previous attacks, adult whole blood or serum has been used for prophylaxis. In 1921, Degkwitz was the first to attempt the production of passive immunity by this method. His good results were confirmed by Salomon[14], Bader[15] and Zinger[16]. However, Townsend in 1926[17] reported poor results and Meyer[18] stated that the serum of adults was of uncertain value because of the low concentration of the antibodies. Hoyne and Gasul[19] believed that 30 cc. of adult serum obtained from an adult who had had measles must be used as compared with 2.5 cc.

to 5 cc. of convalescent serum. Mendelewa in Leningrad[20] compared the results of convalescent serum, adult serum and citrated whole blood. Although his report is not too definite, one might infer from his table that convalescent serum was slightly better than the other immune principles.

Adult whole blood may be used in prophylaxis, but large amounts of it have to be injected, sometimes five and six times as much as convalescent serum. One can never be certain of the antibody content of any one adult serum. Therefore, pooled adult serum should be used if possible. Recently, Karelitz[21] has concentrated the globulin fraction of immune human adult serum and has claimed good results from its use in prophylaxis.

In 1926, Degkwitz[22] obtained a measles serum from sheep. It was tried in various places, but found wanting. Tunnicliff's goat serum[23] is still in the experimental stage.

Recently, McKhann[24] called attention to the use of placental extract, placental immune globulin, in the prophylaxis of this disease. There is every logical reason to believe that serum which carries the factor that prevents the baby from getting measles up to six months of age should be a good source of antibody content. McKhann has shown that a modification of the attack follows the use of this material. From 2 cc. to 4 cc. are injected intramuscularly. Objections have been made to the use of this product because of the local reactions, but the recent advances in serum purification and concentration will overcome these objections. Eley[25] reported a definite modification and prevention of measles following the use of placental immune globulin.

Of all the methods employed, probably the most widely used is convalescent measles serum in doses of 5 cc. to 10 cc. Ten cc. costs from $5.00 to $10.00. Placental extract is next in demand, the dose being from 2 cc. to 6 cc. The cost of 2 cc. is $2.50. The latter product is processed and pooled, and therefore, more standard. When adult whole blood is used, the quantities must be large, at least 30 cc. to 50 cc. There is no definite evidence that horse serum, Tunnicliff's goat serum or Degkwitz's sheep serum is of any value.

TETANUS

Individuals who are exposed to tetanus must be passively immunized. This can be done by injecting a small amount (1,500 units) of antitoxin. The average cost is $1.50. This is a very efficient type of passive immunity. Severely infected individuals, individuals with wounds about the face, etc. may have to be injected twice—once on exposure and again seven or eight days later so that passive immunity will be continued.

ERYSIPELAS

An antistreptococcus serum was prepared by Marmorek in 1896[26]. The same year, Charring and Roger[27], made a specific antiserum. Birkhaug[28] recently revived interest in the use of erysipelas antitoxin prepared from streptococci. Symmers and Lewis[29, 30] reported good results following the administration of erysipelas antitoxin. Blackfan, quoted by Birkhaug, states that streptococcus erysipelas antitoxin is specific in the treatment of infants ill with erysipelas. McCann[31] was not very enthusiastic about its use and stated that previously published reports of results obtained with serum treatment are open to objections.

Killian in 1928[32] reported favorably on the use of human convalescent erysipelas serum and the various horse streptococcus serums in erysipelas.

Adult whole blood, immuno-transfusion and convalescent serum from patients who have had erysipelas have been recommended. Whole blood, obtained from those who have had erysipelas, was first suggested by Kaiser[33] as a therapy for patients actually ill with the disease. Jordan and Dustin[34] reported good results from its use. Normal blood was used by Pines[35] and Deacon[36] used the patient's own blood. Robertson[37] and Brown[38] reported good results with exanguination blood transfusions. Schaffer and Rothman[39] used blood transfusions and felt that the mortality rate was distinctly lowered. Manoussaksis[40] and Jacobson[41] had poor results with erysipelas antistreptococcus serum, but good results with blood transfusions. Hosenblum and Kaznelson[42] treated 83 cases—26 with their own blood, 28 with injections of milk, 7 with Dick scarlet fever antitoxin and 22 symptomatically. They did not believe any decision could be reached, but felt that injections of milk and autohemic therapy, as well as Dick scarlet fever antitoxin, mitigated the toxic symptoms and reduced the patient's stay in the hospital. They said, however, that the Dick antitoxin was sometimes accompanied by unpleasant symptoms of anaphylaxis. Eley[43] obtained good results in the treatment of infants. Recently, Thalhimer[44] obtained successful results from the injection of human convalescent erysipelas serum. There is so much argument about its therapeutic efficiency that the prophylactic use of any passive immune principle in erysipelas has never become popular. If those who have had erysipelas seem never to be actively immunized and are more apt to get the disease again than those who have never had it, and if they cannot even protect themselves, then of what use is their blood as a passive immune principle?

All such therapies have been employed on the theory that the disease is due to a toxin and that this toxin causes the general manifestations of the disease. If this were true, there might be some reason for the prophylactic use of antitoxins or convalescent serums, but the opinion of Birkhaug as to the mechanism of the production of the disease has not been accepted. A theory of sensitization which more clearly fits the clinical facts has been suggested [Dochez and Stevens[45],

Francis[46] and Toomey[47]]. Dochez and Stevens[45] called attention to the fact that the whole process of erysipelas might be explained on the basis of a sensitization phenomenon. Francis[46] showed that (1) most patients acutely ill with erysipelas had plenty of antitoxin in their blood stream at the very time that they got the disease; (2) the cutaneous reactivity of erysipelas patients becomes more marked during convalescence; (3) no toxin can be demonstrated in the circulatory blood of patients during the acute stages; (4) the neutralization of erysipelas streptococcus culture filtrates by the serums of most patients in the acute stage, with apparent loss of this power during convalescence, fails to support Birkhaug's concept of erysipelas as a specific toxemia, recovery from which is due to the development of antitoxic immunity.

It has been shown by skin tests that patients with erysipelas are not susceptible to streptococcus toxins. It has been said that this disease occurs in individuals who have plenty of immunity against the disease, and therefore, the injection of antitoxin or antiserum of any kind is illogical, save in infants. For every case in which the temperature has come down after the injection of erysipelas antitoxin or serum, there can be found a comparable control case where the temperature has acted likewise. It has also been shown clinically that antitoxin does not stop the spread of the lesions of this disease (Toomey[48]). If patients get recurrent attacks within a week or so after a previous attack, one has a right to ask why human convalescent serum should be used. In the light of recent work there is no scientific evidence for such injections in exposures. Why inject expensive antitoxins and convalescent serums when it has been definitely shown that the disease responds so well to sulfanilamide therapy[48]?

ENCEPHALITIS

It has been suggested that encephalitis patients might be injected with convalescent serum obtained from like cases. Anti-influenzal serum has also been recommended. There is no evidence that these are of value either in treatment or prophylaxis. Since, the number of encephalitis cases is so few and it is not known which type of individual gets the disease, there would seem to be no logical reason for injecting an exposure with either serum or antitoxin.

MUMPS

The prophylactic use of human convalescent mumps serum is said to be effective when administered in doses of 2 cc. to 8 cc. before the seventh day after exposure. Large therapeutic doses of from 10 cc. to 40 cc. have been administered[49, 50, 51]. Hess used serum from patients who had had mumps within two years previous to the exposure, the dose being from 6 cc. to 8 cc. Regan[52] injected from 2 cc. to 4 cc. Hess stated that convalescent serum is of value in preventing the spread of the disease in institutions. Most of the evidence favoring its use comes from institutions. When it is remembered that mumps is not easily contracted and that its spread in institutions is easily stopped by isolation and the simplest type of quarantine, one is justified in concluding that the specific value of convalescent mumps serum has not been demonstrated.

PERTUSSIS

Human convalescent serum has been suggested in pertussis[53, 54], but, like so many other things used in the treatment or prevention of this disease, the testimony regarding its use is conflicting. Stokes[55] has recently immunized human beings with phase I, H. petussis organisms and has used the serum of such immunized individuals in passive protection. My experience with convalescent serum has not been very convincing. However, this does not prove that it is of no value. Even though animal neutralization experiments show protection, there is no evidence that such results can be predicated to be the same in human beings. The disease is so drawn out, and the number of organisms and the resistance of these bacilli are so high, that it seems unreasonable to expect that the injection of 20 cc. or even 30 cc. of convalescent serum could have much good effect. The psychic effect of these injections in this disease must be remembered.

VARICELLA

Exposures to varicella have been injected with 10 cc. to 20 cc. of convalescent serum on the first to third day after exposure[56]. This method of prevention has never been very efficient. I see no reason for injecting exposed children in private practice, since the patient rarely dies because of the disease and usually never has any complications. It is impossible to keep an individual in a constant state of passive immunity, and re-exposure means reinjection or infection. The most practical thing is to let the exposures get the disease.

SCARLET FEVER

The use of convalescent serum and whole adult human blood in scarlet fever is not new. Weisbecker[57] first used the blood of a convalescent scarlet fever patient in 1897. He felt that since an individual usually has only one attack of scarlet fever, there must be some immune principle in the blood which might be transferred. It was popular for a while and then lost favor. Zinger in 1914-17[58], Weaver in 1918[59] and Kling and Widfelt in 1918[60] reported good results with its use. Weaver[61] in 1921 confirmed his previous observations, stating that 60 cc. to 90 cc. of serum were injected. Bernbaum[62] in 1922 also had good results with large doses (from 50 cc. to 100 cc.) Bode [63] in 1926 called attention to the acute symptoms, including shock, following the use of

convalescent serum. He stated that the serums of persons previously treated with convalescent scarlet fever serum should not be used. He felt that intravenous injections should be abandoned, intramuscular injections substituted and large doses, from 40 cc. to 100 cc., given. It is clear that good results have been obtained with the use of convalescent scarlet fever serum[64]. However, it is inconvenient to obtain and has a low standard of potency.

The Dicks used specific antitoxins. At first the use of these antitoxins was opposed[65], since they caused too many reactions. Often the patient was sicker with the serum sickness which might follow than he was with the disease itself. Its use was likewise opposed in mild cases. In the past two years, however, various manufacturers of antitoxins have been concentrating and refining their products to the point where now only 1.5 cc. to 3 cc. is injected, as compared with the 20 cc. to 25 cc. previously used. The bulk has been cut down and most of the factor causing serum sickness has been removed. Since we are now furnished with a product that has been definitely standardized so that we know what we are injecting, the objections against the use of scarlet fever antitoxin have been overcome. It is obviously better and costs less than the nonstandardized, low potent convalescent serums. Three cc. of antitoxin cost less than $8.00, while 50 cc. of convalescent serum may cost from $15.00 to $50.00.

Whether or not any of these immune principles should be used in prophylaxis is another matter. Because the contagious index rate of scarlet fever is not high, the chances for escaping the disease are good and suceptibility can easily be determined by the Dick test within 24 hours. There really does not seem to be any good reason to inject everybody who is exposed to scarlet fever with any immune principle. Hoyne, however, injects 10 cc. convalescent serum intramuscularly and repeats it in a few weeks. There is no good controlled evidence in the literature to show that such injections prevent the occurrence of the disease. My own experience has been disappointing, having had several cases of scarlet fever occur in the wards of our Contagious Disease Hospital following the administration of convalescent serum and scarlet fever antitoxin.

POLIOMYELITIS

Poliomyelitis is a disease for which all sorts of therapy have been suggested. A consideration of horse, sheep and other kinds of experimental antiserums is not necessary. It has never been found that they either prevent or modify the disease. In fact, some have felt that these serums might have done more harm than good. In 1910, Levaditi and Landsteiner[66] neutralized virus of poliomyelitis serum by means of convalescent serum in vitro. From that day on it has become a question as to whether convalescent serum should be used in treatment and prevention.

Harmon[67], Cowie, Parsons and Lowenberg[68], Jenson[69] and Levinson[70] have written about the favorable results obtained after the use of convalescent serums in the treatment and prevention of poliomyelitis. Fischer[71] criticized these authors' results. He had 282 preparalytic cases of poliomyelitis admitted to the Willard Parker Hospital, none of which received serum; there was one death and the incidence of paralysis was 20 per cent.

Hoyne[72] favors the use of convalescent serum in prophylaxis on the theory that it does no harm and it might do some good. He feels that it is difficult to make conclusions as to its efficacy.

It is well known that Macacus rhesus monkeys have never been protected by human convalescent poliomyelitis serums, regardless of how given, against poliomyelitis virus introduced either intranasally or intracerebrally. It is well known also that the antibody value of serum varies considerably and that virulence of the virus is likewise variable. Landon[73] states that (1) most favorable reported results lacked proper control cases; (2) the numbers treated were too small; (3) a large number of mild, abortive and doubtful cases were included; (4) treated and untreated cases in the same locality and the same epidemic were not compared; (5) there was variance in the potency of the serum, the amounts injected and the method of injection and (6) different observers had different diagnostic criteria. He called attention to the report of the 1931 New York City epidemic by the Committee of the New York Academy of Medicine and the Committee of the New York Department of Hospitals. They concluded that there was no evidence that convalescent serum is of value.

Landon concludes that convalescent serum not only does no good, but might actually do some harm. We have had two cases of poliomyelitis made worse following massive doses of convalescent serum given intravenously. This is not provincial with us, since De Mattia[74] also described similar results. Certainly, there is no controlled evidence that the serum will modify the course of the disease; the evidence that it prevents an attack is questionable. There is a vague impression with some physicians that the disease may actually be made worse.

If we were to inject all those exposed to the disease, it would be impossible to obtain enough serum. In a large city like Cleveland, a severe epidemic of poliomyelitis consists of 100 cases a year. Of these 100 cases, perhaps 30 will be severely hit, and of these 30, perhaps only 20 will have neutralizing antibodies of a high titer. Based on these statistics, it would mean that, in Ohio, approximately 100 patients would have to furnish all the serum necessary for those desiring passive immunization against the disease.

Such a thing is mathematically impossible. To quote a recent comment[75], "The deciding factor as to whether serum should be given is often the pressure brought to bear by the public. For the use of serum in poliomyelitis has been so publicized and the fear of the disease (both by laymen and physicians) is so great that many physicians in this country at least, hesitate to withhold serum treatment." It must be pointed out that a physician is not neglecting his duty if he fails to inject poliomyelitis serum, either in treatment or prophylaxis. Large amounts, from 50 cc. to 100 cc. intramsuscularly, have been recommended by the proponents of prophylaxis. Such prophylaxis would be extraordinarily expensive, costing approximately from $25.00 to $50.00, and with no assurance whatsoever that the individual is going to be protected or cured.

COMMENT

What type of passive immune principle, human or animal serum, is best to use to modify or prevent an acute infection? My inclination would be to use animal antitoxins or antiserums, since they are hyper-immune, pooled and are made under standard precautions by biological laboratories who have had a great deal of experience in manufacturing them, and who are legally responsible should anything go wrong. Shaw[76] states that "the use of human serum involves the clinician with somewhat greater responsibility regarding its collection and storage and in safeguarding against the possibility of thus transferring the patient some other communicable disease than is the case with commercially prepared horse serum." Human serum is not tested for antibody content; it is weak in antibodies, costs more to produce and is not so efficient.

CONCLUSION

There is no good reason passively to immunize individuals exposed to varicella, erysipelas, whooping cough, mumps, encephalitis and scarlet fever with human convalescent serums. There is still some debate as to whether to use human convalescent poliomyelitis serum, even though there are convincing arguments against its use. Tetanus and diphtheria are easily prevented by commercial antitoxins; measles, by human convalescent serum, adult serum or commercial placental immune globulin.

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Growth Factors for the Tubercle Bacillus

The tubercle bacillus grows rapidly and well on simple synthetic media but needs very heavy seeding. No growth occurs if less than about 10^{-1} mg. bacilli are planted. On egg medium, on the other hand, growth occurs after seedings of 10^{-6} or 10^{-7} mg.

A possible explanation is that the tubercle bacillus needs another factor for growth in addition to the well-known asparagin, glycerine, phosphate, magnesium, potassium and iron. It has recently been found that certain pathological micro-organisms as staphylococci and diphtheria bacilli need accessory growth factors, as nicotinic acid amide and thiamin (vitamin B_1). The possibility of the existence of such a growth factor for the tubercle bacillus is of special interest as it may lead to the control of the disease by diet.

We first investigated the possibility of riboflavin (vitamin B_2) being the accessory factor as we had been able to identify riboflavin in cultures of tubercle bacilli by its fluorescence spectrum. However, the addition of riboflavin, either alone or together with other substances had only a very slightly favorable effect.

The growth promoting substance can be isolated from egg yolk by extraction with fat solvents. When this fat soluble growth factor is added to a synthetic medium, it forms a culture medium on which tubercle bacilli grow more rapidly than on egg medium, even after very small plantings.

Extracts have been prepared of this growth promoting factor which are active on addition of 1 mg to 5 cc. medium, representing a 5,000 times greater activity than is found in the egg yolk. Further study is needed to isolate and identify this material.— C. H. Boissevain, M.D., and H. W. Schultz, M.D., Colorado Springs, Colo.

Genital Primary Syphilis

Primary syphilis may look like and must be distinguished from: Gonorrhea, Chancroid, Herpes progenitalis or simplex, Scabies, Venereal warts, Carcinoma, Granuloma inguinale, Lymphopathia venereum, Balanitis gangrenosa, Traumatic lesions, Pyogenic lesions, Secondary syphilis, Late syphilis—gumma.—Supplement No. 5, Venereal Disease Inf., U.S.P.H.S.

CHRONIC GASTRITIS: PRESENT DAY STATUS

PART I.

By LEON SCHIFF, M.D. and SANDER GOODMAN, M.D., CINCINNATI, OHIO

DURING the past two decades, due primarily to knowledge gained through histopathology, radiology, biopsy and gastroscopy, the pendulum as regards gastritis has swung back toward the position it occupied during the greater part of the nineteenth century when all cases of dyspepsia were attributed to gastritis except those caused by gastric ulcer and cancer. The recognition of such causes of dyspepsia as gastric secretory disturbances, chronic disease of the gall-bladder, appendix, duodenum, colon and urinary tract had caused a wide swing from the original position.

Ever since 1900, when he began his investigations on the formalin-fixed stomach together with Bloch, Knud Faber[1] has emphasized the frequency and importance of chronic gastritis and its relationship to anacidity and anemia. Additional interest in this subject resulted from the introduction of a means of demonstrating mucosal folds roentgenologically by Forssell (1913)[2] and later by Berg[3] and his pupils. In 1923, Konjetzny[4] reported the results of studies made on a large surgical material consisting of partially resected stomachs. He not only confirmed the histo-pathologic observations of Faber but in addition described erosions in the mucous membrane of the stomach and their significance in the formation of ulcer. In the same year, Schindler[5] published his first monograph on gastroscopy, based on the use of his rigid instrument, in which he classified gastritis and emphasized the importance of gastroscopy in diagnosis. His observations were soon amplified by various European gastroscopists including Henning[6], Guzeit[7], Korbach[8], and Moutier[9]. The clinical contribution of Hurst[10] like those of Faber have emphasized the relationship of gastritis to anacidity, pernicious anemia and combined cord degeneration, microcytic anemia, peptic ulcer and gastric cancer.

The introduction of the flexible Wolf-Schindler gastroscope in 1932 marks the beginning of what should prove a most important era in the study of gastritis. This instrument has made gastroscopy a safe procedure readily carried out and one which seems rightfully to be falling into the hands of clinicians interested in gastro-intestinal disease. With its use, the first studies on gastritis were reported in this country by Benedict[11, 12], and later on, by the Jacksons[13], Swalm and Associates[14], Schloss[15], Gaither and Borland[16], Schindler and Ortmayer[17] et al. In 1937, Schindler's[18] monograph on Gastroscopy appeared in English. From a vast experience with gastric disease, he concludes that gastritis is the most common disease of the stomach. Hurst[10] has recently stated that chronic gastritis is the only common primary disease of the stomach. In referring to gastroscopic studies of gastritis, Faber[19] states that "although control tests by anatomical investigations are still to some extent lacking in such diagnosed cases of gastritis, it would seem that we must accept these observations which so accurately agree with the anatomical findings we have described."

ETIOLOGY

Little is known about the etiology of chronic gastritis. Dietary indiscretions, poor dental hygiene, improper mastication and bolting of food, ingestion of very hot or very cold foods and excess of tobacco and condiments may produce irritation of the gastric mucosa. Alcohol seems an important chemical irritant and has been shown by Thomsen[20] to produce gastritis and achylia in dogs through daily oral administration. It was shown by Beaumont[21] to produce the same changes in Alexis St. Martin's stomach as are observed gastroscopically in superficial gastritis. Faber[19] has emphasized the importance of acute infections, notably diphtheria and influenza, in hemotogenously producing acute gastritis which may later progress into the chronic form. Nyfeldt and Vimtrup[22] have demonstrated gastritis in the formalin-fixed stomachs of patients dying from

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diphtheria. Thomsen[20] has produced acute gastritis in dogs through the intravenous injection of diphtheria toxin.

Hurst[23] believes that gastritis from any one or more of the factors listed above is particularly apt to develop in the 20 per cent of the population, who, on the basis of the observations of Bennett and Ryle[24], have either hyperchlorhydria or hypochlorhydria (and achlorhydria) in contrast with the remaining 80 per cent of people who have normal acidity. In the individuals with hyperchlorhydria, the excess of acid acts as an additional irritant on the mucosa while in hypochlorhydria (and more particularly achlorhydria) the bacteria which are present in the stomach, because of the lack of the bacterial effect of acid, may produce additional irritation.

Schindler and Giere[25] and Schindler[26] have recently stressed the importance of a rather severe form of gastritis which frequently develops in patients with peptic ulcer who have been submitted to surgery, particularly gastro-enterostomy.

Quite recently Jones, Benedict, and Hampton[27] have reported the disappearance of gastritis (both atrophic and hypertrophic) during induced remissions in cases of pernicious anemia strongly suggesting that the gastritis so constantly present in this disease may represent "an epithelial change associated with a specific deficiency state." Lehman[28] reports improvement of atrophic changes in two cases of pernicious anemia treated with liver extract intramuscularly. Our own observations[29] confirm these reports and have in addition shown the disappearance of atrophic changes following the oral administration of desiccated hog's stomach extract ("ventriculin") in patients having atrophic gastritis without pernicious anemia. They therefore also suggest the importance of a deficiency state in chronic gastritis.

PATHOLOGY

The gross pathological changes which occur in gastritis are described in the sections dealing with gastroscopic appearances. Microscopic changes include round cell and plasma cell infiltration, proliferative changes, deposition of varying amounts of connective tissue, goblet cell metaplasia, glandular atrophy, cystic enlargement of gland remnants or atrophy of the entire mucous membrane.

SYMPTOMATOLOGY

Observers[30, 31, 9, 12] are agreed that there is nothing characteristic about the symptomatology of gastritis. As a matter of fact, symptoms may be entirely absent, particularly in the superficial and atrophic forms. Our experience coincides with that of Benedict[12] in that there is usually something to direct the patient's attention to his stomach. Epigastric discomfort, anorexia, eructation of gas, a bad taste and fullness after meals are frequent complaints. Not infrequently there is a complaint of a gnawing post-prandial pain relieved by food and soda closely resembling that which occurs in cases of peptic ulcer. An ulcer syndrome without a demonstrable ulcer should always lead to a suspicion of gastritis. In some instances, the patient experiences pain immediately after eating as well as several hours later. Epigastric distress is also apt to follow gastric intubation or gastroscopy. Massive hemorrhage is not infrequent particularly in the hypertrophic form, (vide Benedict's recent report[32]). In the atrophic form in particular, nervousness and fatigue may be so prominent that the patient is apt to emphasize these symptoms more than his digestive complaints and is not infrequently mistaken for a psycho-neurotic.

PHYSICAL EXAMINATION

Physical examination is of chief value in excluding or establishing the presence of coexisting disease. In cases of superficial gastritis Schindler[18] emphasizes the presence of a tender zone which extends "along the left side of the middle of the abdomen" to below and to the right of the navel and may be best brought out "by palpating gently from the left iliac crest to the umbilicus." Glossitis may be present in the atrophic form.

GASTRIC CONTENTS

In cases of chronic gastritis, there is generally an increase of mucus in the gastric contents and decrease or absence of free hydrochloric acid; although in individual cases the acidity may be normal or even increased and mucus may be present in normal amount. Post-histamine anacidity, however, most commonly indicates the presence of atrophic gastritis although it may occur in histologically normal stomachs (Faber[19], Henning[31], et al.) We have gastroscoped 22 patients with permanent posthistamine achlorhydria not associated with gastric carcinoma or pernicious anemia and three patients with transient (post-histamine) achlorhydria. Fifteen of the group showed atrophic gastritis; five, superficial gastritis; two, hypertrophic gastritis and three, a normal mucosa.

Schindler[18] states that the microscopic examination of gastric contents with particular reference to cell content is extremely unreliable in the diagnosis of gastritis. We have not employed this procedure. However, the microscopic examination (after fixation) of a piece of mucous membrane obtained by lavage may be of definite value.

X-RAY EXAMINATION

The chief value of X-ray examination in cases of gastritis lies in the exclusion of other lesions of the stomach rather than in the demonstration of gastritic changes. While marked hypertrophic

changes have been occasionally demonstrated, it has repeatedly been shown (Henning,[31] Schloss, Ettinger and Pratt[33]) that enlarged folds, thought to be indicative of hypertrophic change, may be observed in X-ray examinations of normal stomachs or even in cases where there is atrophy of the mucosa. On the other hand, the demonstration of thin folds but rarely justifies the diagnosis of atrophy (Berg[3], Schloss, Ettinger and Pratt[33]). The explanation for such discrepancies is that the enlargement of the folds is due to functional changes of the submucosa and muscularis mucosae rather than to mucosal changes (Forssell[34], Henning[31]).

It is agreed that atrophy or erosions cannot be conclusively demonstrated by X-ray (Schatzki[35], Schloss et al.[33]). It seems therefore that the X-ray, valuable as it is in the diagnosis of gastric disease in general, is of negligible value in the direct diagnosis of gastritis.[36, 37]

CLASSIFICATION

The classification of chronic gastritis is difficult because of overlapping of changes. Knud Faber[19] on purely histological grounds has classified gastritis into two distinct forms: "Gastritis progressive atrophicans and chronic erosive gastritis". Keith Simpson[38] divides gastritis histologically into (1) simple (parenchymatous) and (2) hypertrophic (mammillary), both of which he designates as subacute and (3) an atrophic or chronic form. Classifications on basis of etiology have been proposed, but these are obviously unsatisfactory. Schindler[17, 18] has classified gastritis gastroscopically into (1) superficial, (2) hypertrophic, (3) atrophic and (4) post-operative. We have followed his classification and have found it very helpful. Some observers like Henning and Schloss prefer to give a short summary of the outstanding gastritic changes rather than to employ an arbitrary nomenclature.

(1) **Chronic Superficial Gastritis.** This is characterized gastroscopically by (1) **reddening** of the mucosa, usually patchy in distribution, accompanied by small hemorrhages, (2) **swelling** of the mucosa which appears soft and boggy, more moist than normal and presents an increased number of high lights and (3) **exudation** of mucus generally of a grey color and best seen adhering to the surface of the mucosa in the spaces between the rugae. The mucosa exhibits an increased tendency to bleed. Small reddish or grey erosions are infrequently seen which may be the site of hemorrhage.

(2) **Chronic Hypertrophic Gastritis.** There is a swelling of the mucous membrane which presents a dull velvety appearance with diminution of high lights. Irregular creases may be seen. The changes at first occur between the rugae, producing a granular or warty appearance. Nodules of various sizes may make their appearance, at times giving a polypoid appearance. The rugae may be rigid and short and may present a beaded or segmented appearance. Hemorrhages of varying sizes are frequently present. Yellowish erosions commonly occurring on crests of rugae are frequently seen and form the basis of the "erosive gastritis" of some authors. Hypertrophic gastritis is frequently seen in the area surrounding a gastric ulcer. Where there is considerable infiltration, it may be difficult to distinguish this form of gastritis from carcinoma or syphilis. In a case which recently came under observation, a gastroscopic diagnosis of hypertrophic gastritis was made because of marked thickening of the rugae which proved later to be due to carcinoma.

(3) **Chronic Atrophic Gastritis.** Atrophic changes may be localized or diffuse. Moutier[9] feels that the gastric mucosa exhibits three stages of involvement: (1) thinning, (2) disappearance of the gastric rugae and (3) in well advanced cases arborization of the underlying submocosal vessels. The mucosa appears grey or greyish-green in color instead of the normal orange-red. When the process is localized, the greyish patches are seen to be slightly depressed. They most commonly occur just above the angulus and along the lesser curvature. In more advanced cases due to thinning of the mucosa, the branching vessels of the submucosa are distinctly seen. The rugae are much less prominent than normal and may be entirely absent. There may be coexisting superficial gastritis. Large musocal hemorrhages may occur, while erosions are rare. Chevallier and Moutier[39] feel that hemorrhage may result if the vessels become very large (varicose), a complication which we believed to have probably taken place in one of our patients.

(4) **Post-Operative Gastritis.** Chronic gastritis frequently occurs after operations such as pyloroplasty, gastroenterostomy or partial gastric resection. Any of the mucosal changes described under superficial or hypertrophic gastritis may be present. Schindler[40] states that it is the most frequent cause of gastric symptoms following operation. Lange[41] found evidence of gastritis in microscopically examining pieces of mucous membrane obtained from the region of the stoma, in 48 pr cent of cases of gastro-enterostomy. The occurrence of post-operative gastritis is not necessarily dependent on the existence of gastritis prior to operation. The mechanism of its production is not clear.

PROGNOSIS

According to Schindler[18], about 80 per cent of treated cases of superficial gastritis recover completely; whereas about 20 per cent progress into atrophic gastritis. The outlook in hypertrophic gastritis, however, is said by this author to be very unfavorable. Patients with this form of the

disease frequently suffer more pain and distress than patients with peptic ulcer (Schindler[18]). We have, nevertheless, recently seen the disappearance (gastroscopically) of a localized hypertrophic gastritis following repeated lavage in a patient in whom both the presence and disappearance of the lesion were verified by Dr. Schindler. Jones, Benedict, and Hampton[27] reported the disappearance of hypertrophic changes in cases of pernicious anemia treated with liver extract; an observation which may alter the outlook in hypertrophic gastritis otherwise uncomplicated. It was felt until recently that atrophic gastritis represented an irreversible end stage of gastritis. The observations of Jones and associates in cases of pernicious anemia as well as those of Lehman[28] and ourselves, together with our observations[29] of the effect of large doses of desiccated hog's stomach extract (ventriculin) in atrophic gastritis not associated with pernicious anemia, suggest that the outlook in atrophic gastritis may be much more favorable than formerly believed.

TREATMENT

Preventive and therapeutic measures should first be based on the factors listed in the discussion of etiology. Proper dental hygiene should be stressed. The diet should be bland and where fullness after meals is prominent, frequent small feedings may be advised. In the presence of erosions, bed rest is advisable. Alkalies or dilute hydrochloric acid may be given, depending somewhat on gastric acidity. Lavage, in our experience, has proved very beneficial particularly in cases of superficial and postoperative gastritis. Alkaline solutions are to be desired because of their property of dissolving mucus. Charged waters have, through their bubbling effect, the theoretical advantage of mechanically detaching surface mucus which may be obstructing the mouths of the gastric glands and thus prevent the gastric juice proper from reaching the stomach interior (Hurst[42]). Like Henning[31] we have employed lavage with Carlsbad water.* Some authors prefer weak solutions of silver compounds either orally (Gutzeit[43]) or by lavage (Henning[31]). Hurst[44] employs such solutions in post-operative gastritis. In cases of atrophic gastritis we do not employ lavage. Hurst, however, has employed dilute solutions of hydrogen peroxide and, in a few instances of achlorhydria, has reported the return of free acid. Schindler[18] advises the use of liver extract in atrophic gastritis. We have administered large doses of desiccated hog's stomach extract orally with marked subjective and objective (gastroscopic) improvement. When intractable symptoms persist in post-operative gastritis, it may be necessary to undo the gastro-enterostomy or according to Benedict[45] resort to further resection.

* The preparation used was a charged artificial Carlsbad water kindly furnished by W. T. Wagner & Sons. A preparation of Artificial Vichy has also been used.

GASTRITIS AND ULCER

The relationship between chronic gastritis, duodenitis, and peptic ulcer was discussed before this section at the annual meeting in October, 1935, by Stix[46]. As this author stated, gastritis has not been definitely proved to be the cause of ulcer. Nevertheless, such eminent observers as Faber[19], Konjetzny[47, 48] and Hurst[10] feel definitely that gastritis leads to ulcer. Konjetzny[4, 49] in a large surgical material finds constant concurrence of chronic ulcer and erosive gastritis; whereas Walters and Sebening[50] in a similar type of material have been unable to confirm this observation. Henning[31] has observed a typical surface ulcer of the stomach develop from a small erosion in the course of four to six weeks. Schindler[18], on the other hand, states that such ulcers may not be true gastric ulcers as they disappear too rapidly. He states that he is unable to find the slightest gastroscopic evidence of gastritis in many cases of both gastric and duodenal ulcer. It appears that gastritis develops rapidly in cases of duodenal ulcer with pyloric obstruction.

We have gastroscoped 22 cases of gastric ulcer and have found gastritis present in 14 or 64 per cent of the group. In 39 cases of doudenal ulcer gastritis was found to be present in 30 cases or in 77 per cent. The existence of the gastritis was verified pathologically in three of the cases in each group.

GASTRITIS AND CARCINOMA

It seems established that gastritis (most frequently atrophic) is present in almost every case of gastric carcinoma (Faber[19], Hurst[51], Konjetzny[48], Schindler[18], Bloomfield and Polland[52], et al.[53]). In 1889, Matthieu[54] contended that a preexisting gastritis predisposed to later development of cancer. In 1913, Konjetzny and Saltzman[49] adduced evidence demonstrating histologically transitions from gastritis to cancer.

The achlorhydria present in about 70 per cent of cases of gastric carcinoma is a result of gastritis and not of the growth of the carcinoma as previously supposed. As a matter of fact, there is no evidence to support the contention that a growing neoplasm produces achlorhydria (Bloomfield and Polland[52], Hurst[55]). Bloomfield and Polland[52] report two instances of actual rise in acidity as the growth progressed. On the other hand, Hurst has seen five cases with known antecedent achlorhydria develop gastric carcinoma and reports finding records of at least 22 similar cases. He[51] calls attention to the fact that gastric carcinoma occurs much more frequently in the lower social clases in England than in the well-to-do and attributes this to the defective alimentary hygiene among the poor,

predisposing to gastritis. We think however, that a resulting deficiency state may possibly play a role. We have examined gastroscopically 32 patients with carcinoma of the stomach. Gastritis was found to be present in 22 cases or 69 per cent. In six cases or 9 per cent, however, no mention of the presence or absence of gastritis was made in either the gastroscopic or necropsy reports. In three cases or 9 per cent no gastritis was found.

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(Continued in December Issue)

Four Diseases Confused With Syphilitic Alopecia

Generalized loss of hair following acute or chronic illness.

Alopecia areata. Lupus erythematosus. Leprosy.

Look for hair loss on eyebrows, pubis, axillae, and body, as well as scalp. Do a blood serologic test.—Supplement No. 5, Venereal Disease Inf., U.S.P.H.S.

SURGICAL TREATMENT OF DIVERTICULITIS

By THOMAS E. JONES, M.D., Cleveland, Ohio

DIVERTICULA are sacculations or small herniations along the lumen of the large bowel caused by muscular defects or protrusion of the mucosa through attenuated spots in the underlying coats. Hence there are only two layers in the diverticular walls—the mucosa and the peritoneum. In recent years, extensive routine roentgen examinations of the gastro-intestinal tract have shown us that diverticulosis is much more common than was previously supposed, and we also know that many people go through life without any complications resulting from them just as many people do with gall stones which may be asymptomatic.

The incidence of diverticula is between 5 and 7 per cent, as determined by routine examinations. When an inflammatory process arises in a diverticulum, the condition known as diverticulitis results, and studies of a large number of cases have shown that in about 15 per cent of cases of diverticulosis, diverticulitis results. Therefore, in 1000 routine cases, there will be about 60 cases of diverticulosis in approximately eight of which the complication known as diverticulitis will develop.

Diverticula occur more commonly in males, the ratio being about three to two. It is seldom troublesome before the age of 40 years and is preponderant between 50 and 70. Obese patients are more likely to be affected than those who are thin.

Diverticula may occur throughout the entire colon or they may involve one or more segments, but it is worthy of note that ordinarily only those in the sigmoid give rise to complications. This is probably due to the fact that the lumen of the sigmoid is smaller in caliber and the stool is firmer.

When diverticulosis is discovered in a routine examination, I think it is common practice to regard the condition lightly because it is known that the chance of the development of complications is only about one in eight or ten. I do not think this is the proper attitude because it may be that wise medical care would save a certain number of these patients from future complications. Furthermore, it is quite possible that many minor disturbances of the gastro-intestinal tract may be reflex from these apparently benign conditions. If a case is discovered during a routine roentgen examination and if the patient has no abdominal distress and the bowel function is normal, prophylactic treatment involves the use of a relatively smooth diet and avoidance of the ingestion of seeds or coarse fibers which may get into the diverticulum and result in irritation.

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But picture, if you will, a diverticulum which becomes filled with colonic contents or a foreign body. As was stated previously, a diverticulum is a pouch which has no muscular coat, so it is unable to empty itself. The contents become solidified, cause ulceration in the mucosa, and infection ensues which produces the picture of diverticulitis. It is apparent then that the signs and symptoms vary greatly according to the extent of the process, ranging from a slight soreness in the left lower quadrant to the more grave symptoms of obstruction and peritonitis.

For a practical discussion of the subject, diverticulitis may be classified into three groups:

1. Diverticulitis with enterospasm.
2. Diverticulitis with infiltration.
3. Diverticulitis with perforation.

It is apparent that these are progressive stages of the same pathologic process and that two or more stages may be present at the same time. You will also realize that even though diverticulitis has been called left sided appendicitis, the surgical problems presented do not parallel those of acute appendicitis and while generalized rules may be applied, this condition calls for much more individualization.

DIVERTICULITIS WITH ENTEROSPASM

Group one is probably the most common of the three types. The patients in general give a history of a change in bowel habit. An increasing constipation has been noticed for a few days or a week, and frequently an attack may be precipitated by excessive use of laxatives for this constipation. The patient is conscious of a soreness in the lower part of the abdomen, chiefly in the left side although occasionally it will be in the right side beause the sigmoid may occasionally be found there, and appendicitis may be suspected. A differential point is that the pain in diverticulitis is generally below the umbilicus

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whereas epigastric pain is present early in appendicitis with localization later. There is rarely any elevation of temperature or leukocytosis. Generally there is not a palpable mass, although in thin patients one may feel a spastic sigmoid which is definitely tender.

Roentgen examination by use of the fluoroscope and the barium enema is most valuable in cases of this type. A varying degree of spasm will be found over a considerable length of the sigmoid and it may be so great that it causes an intermittent obstruction to the flow of the enema during which the patient will complain of pain in the lower left quadrant. These films, in addition to showing diverticula, will present a double sawtooth appearance of the sigmoid due to spasm of the circular fibers.

In the majority of cases seen in this stage, the inflammatory reaction subsides following treatment which is medical. The patient should be put to bed and large hot packs should be used over the entire abdomen. In addition to a smooth diet, the intermittent use of antispasmodics and sedatives is usually indicated. If tincture of belladonna is used, it is given in full physiological doses which, of course, because of varying degrees of tolerance, must be adjusted for each patient. The intermittent use of relatively small doses of phenobarbital before meals has been found effective in relief of intestinal spasms. After subsidence of the acute symptoms, the patient should be instructed to avoid irritating laxatives and an effort should be made to restore normal bowel habits. In order to reeducate the rectum, it is advisable to use a glycerin suppository or a small plain water enema at the habit time for a week or two. If the patient has had hard, dry stools, small oil retention enemas, two or three ounces, at bedtime may be used at the start of the treatment. Drinking plenty of water, adequate exercise, as well as making certain that there is ample residue in the diet are important principles to include in the management.

It has frequently been noted that patients with an irritable bowel due to this condition will volunteer the information that they feel better following the roentgen examination. Presumably this is due to the filling of the diverticula with barium and on this assumption, we advise the patient to take a tablespoonful of barium sulphate in water twice a week in order to keep the diverticula filled with barium and replace the infectious material.

There is some controversy regarding the use of mineral oil in these conditions. The ideal to be achieved is a formed, soft stool and it may be necessary to use the oil in some cases.

DIVERTICULITIS WITH INFILTRATION

If diverticulitis with enterospasm does not subside under this treatment, it progresses further into Stage 2, namely diverticulitis with infiltration. Here roentgen examination shows an increase in the deformity in the bowel and, instead of an inconstant filling defect due to spasm, it presents a harder, more fixed appearance due to inflammation and edema of the bowel wall. Due to this inflammation and edema, the filling defect is quite long and this is a valuable point in making a differentiation from carcinoma where the filling defect is limited to a narrower segment. Furthermore, the edema in the bowel wall may close off the ostia of the diverticula so that they may not fill with barium and so be visualized. In this type, it may not be possible to make a differential diagnosis between diverticulitis and carcinoma and one must resort to clinical measures to make the differentiation. In both diverticulitis and carcinoma a mass is frequently felt, but generally there is considerably more tenderness on palpation in diverticulitis than in carcinoma unless there is impending perforation in the malignancy.

The obstruction which results from diverticulitis is due to extrinsic inflammatory reaction and contraction of the underlying coats of the bowel in contradistinction to that produced by ulcerating carcinomas. There is no evidence to support the view that carcinoma results from diverticulitis although in a very low percentage of cases both lesions may be present in the same segment. These two diseases occur in the same period of life and it is only natural that they should coexist in a certain proportion of cases. In a series of over 300 cases of resections of the rectum and rectosigmoid, I have encountered this double condition in only three cases or 1 per cent. There is generally a slight elevation of afternoon temperature in the case of diverticulitis as contrasted to that in malignancy. A history of increasing constipation in middle aged and elderly individuals is common in both conditions but the time element is a valuable diagnostic aid. Bleeding is a very significant sign and is, of course, far more common in carcinoma than diverticulitis. When bleeding occurs in diverticulitis, it is generally due to hemorrhoids and therefore it is absolutely essential to make a proctoscopic examination before a final opinion is rendered.

It is apparent then that the diagnosis is not easy and it entails a careful history and thorough palpation of the abdomen, followed by digital and proctoscope examinations, and lastly roentgen examination by use of the fluoroscope and films. Only after evaluation of all this data can we hope to attain any proficiency at diagnosis and treatment. Even at operation the surgeon may be unable, in certain cases, to differentiate between diverticulitis and carcinoma; hence, it is necessary to secure all information possible.

The treatment in Stage 2 is also medical until such time as complications arise. The patient

should be put to bed with large hot compresses over the entire abdomen. Diet should be a bland, non-residue one, and antispasmodics and sedatives should be used liberally. Oil retention enemas at night and warm rectal irrigations should be used each morning. After the attack has subsided, the principles of bowel management outlined previously should be followed.

If it does not subside, obstruction is the chief complication in this stage. It is due to the tremendous thickening in the mesentery and all the coats of the bowel. Here clinical judgment alone decides the optimum time for surgical intervention. The duration of the ailment, the general condition of the patient, the degree of distention, and the presence of vomiting must all be considered in making the decision. I incline to the conservative side. If the indications for surgery arise in this stage, I think it should be limited to a colostomy at some distance above the mass. I am aware that it is possible in occasional cases to do a Mikulicz operation and resect the mass, but in most instances the bowel must be mobilized in order to bring it out. I do not think it is a sound surgical principle in the presence of a diffuse inflammatory process in the bowel wall. At any rate, we know that there is a definite mortality from this procedure whereas a colostomy carries practically none. If the process is low in the sigmoid, a left inguinal colostomy may be done. If the mass is definitely palpable in the lower left quadrant, I think it is wiser to make a colostomy in the transverse colon. This procedure will take care of the emergency and the process will generally subside under through and through irrigations.

After convalescence, progress studies by sigmoidoscopic and roentgen examinations will determine the future course to be taken. The process may subside entirely so that the colostomy may be closed but the patient should be encouraged to keep the colostomy for six months or one year. If the diverticular process is limited to a segment of four to six inches, it may be wise to consider resection of this segment while the patient has a colostomy, but if the roentgenogram shows the diverticula to be more extensive than this, resection may not be feasible. In this case, the patient must assume part of the responsibility if he insists on closure of the colostomy because we cannot guarantee that he may not have a recurrence of his trouble. In case the colostomy is closed, the patient must be put on rigid bowel management in an effort to offset further trouble.

DIVERTICULITIS WITH PERFORATION

In the third stage—viz., diverticulitis with perforation, this perforation may be acute or it may be chronic and while fewer cases occur in this group, they present definite difficulties in diagnosis.

In the acute fulminating variety, the symptoms are so alarming that it constitutes an emergency and the diagnosis is frequently not made until exploration is undertaken. The preoperative diagnosis is generally that of acute appendicitis, volvulus, or perforation of a viscus. That the diagnosis of acute appendicitis is most commonly made is not surprising because very frequently the sigmoid is in the midline or even over on the right side. The only responsibility one has at this time is to save the patient's life and in any emergency, therefore, we must carry out only the simplest surgical procedure which will deal adequately with the lesion. In acute perforating diverticulitis, this consists only of incision and drainage. A tube and gauze drain should be placed down to the area of perforation. One should not attempt to close over the perforated area with sutures because the sutures will not hold in the infected, edematous wall of the gut. Furthermore, it is time consuming and traumatizing and may conceivably break down protective barriers.

Postoperative treatment is symptomatic and directed toward the prevention of peritonitis. If the bowel wall is greatly thickened and there is evidence of obstruction, a cecostomy for decompression may be done at the same time. The judicious use of prontylin is worthy of trial in these fulminating cases. If the surgeon does not see these patients until 12 or 24 hours have elapsed, he must then use his own clinical judgment as to whether operation should be performed immediately or whether he should use symptomatic treatment and wait for localization. In either case, sufficient time should be taken to prepare the patient for operation by administering glucose and saline in amounts adequate to put the patient in chemical balance. This is not time consuming and can be done while the operating room is being prepared.

Chronic, or what one may term gradual, progressive perforation with formation of a peridiverticular abscess confronts the surgeon with a real problem, both from the diagnostic and the therapeutic standpoint. Here again, the condition must be differentiated from malignancy by the use of the methods described previously. In favor of perforating diverticulitis is a history of several previous attacks with pain and elevation of temperature. Constipation is the rule and blood in the stool occurs only occasionally. Rectal examination will frequenty reveal a tender mass in the pelvis. In the female, one must constantly bear this possibility in mind in the case of a mass in the left side. Such masses are frequently called tubo-ovarian abscesses and here an accurate history and the age of the patient are valuable aids. Especially in men, the early symptoms often may point to pathology in the genito-urinary tract, with frequency of urination and pain in the lower

abdomen, which is referred to the kidney. This is due to the proximity of the inflammatory process to either the bladder or ureter.

In these cases with abscess formation, roentgen examination must be used cautiously, especially where there may be increasing obstruction. A routine examination of the colon should not be ordered, but the roentgenologist should be used as a consultant. Tell him what is suspected because roentgen technic is varied according to the problem at hand.

In the presence of a peridiverticular abscess, one of the following things may happen:

1. It may perforate into the bowel with discharge of pus.

2. It may perforate into the bladder.

3. It may perforate into the surrounding tissues and become walled off.

4. It may perforate through the pelvic floor and simulate an ischiorectal abscess or fistula in ano.

If it perforates into the rectum, it is a fortunate and happy sequel. There will be sudden relief from pain and the patient will have several movements which, if examined, will be seen to consist chiefly of pus. Treatment is symptomatic and attention should then be directed along medical lines as outlined previously to offset possible recurrence. If it perforates into the bladder, a vesicocolic fistula results and this is a miserable complication which will be evidenced by marked irritability of the bladder and the passage of pus, feces, and air per urethra. The first step in handling such a condition is to do a colostomy high in the sigmoid or preferably in the transverse colon to sidetrack the fecal current. Following this, daily irrigation of the distal segment and the bladder should be instituted. If the opening is very small, it is conceivable that the opening will close spontaneously. This can be determined by cystoscopic examination and cystograms or by irrigating the colon with a solution of gentian violet to see if it is recoverable in the urine. A barium enema should be given also to determine the extent of the process in the sigmoid and from these facts one has the option of closing the colostomy if the bladder fistula is closed, or resecting the process before the colostomy is closed. The choice of the procedure depends upon the amount of bowel involved. If the segment involved is short, then resection is the treatment of choice. If it is long, it would be advisable to keep the colostomy for a long time even if the fistula has closed spontaneously. I am sure that laparotomy with dissection of the fistula and closure of the bladder and colon in one stage without preliminary colostomy is poor surgery. It carries a high mortality and frequent recurrence, or one will end up with a persistent abdominal fistula.

Finally, if the perforation is into the mesentery or surrounding tissue, it may become walled off. In this case, it may find its way out on the abdominal wall or the buttock or it may be incised extraperitoneally when it seems to point. The optimum time for intervention in this type of case taxes one's surgical judgment to the utmost.

During this waiting process, symptoms of obstruction may develop which may give the surgeon considerable anxiety. If the process appears to be localizing otherwise, I would advise a cecostomy or transverse colostomy and at the appropriate time a left McBurney incision should be made and the abscess drained because such abscesses eventually point in this area.

Whether the abscess ruptures spontaneously or is opened surgically, the end result is generally a fistula and the next problem is what to do about the fistula. This depends on many factors. If the patient did not require a colostomy, I would not do anything about the fistula for a long time because I have seen them close spontaneously after 15 months. The fistula is very little nuisance, generally discharging pus but rarely any fecal material.

If a colostomy has been performed, naturally the patient is anxious to have it closed. In this type of case, one can secure considerable information by injecting the sinus with bismuth, and with a barium enema the extent of the process in the colon may be ascertained. If a small segment is involved, resection of that segment including the fistula may be undertaken before the colostomy is closed. It is not good surgery to dissect out the fistula down to and including the diverticulum and try to close the bowel over because it will fail in most cases and the fistula will re-form.

If the entire sigmoid is involved, the patient should be encouraged to keep the colostomy but, refusing this, he must realize that the abdominal sinus will probably be permanent. This causes little inconvenience provided it is kept open and allowed to drain. It is well to bear in mind that a chronic fistula in and around the rectum which has been attributed to a fistula in ano or a pilonidal sinus may have its origin in a diverticulitis of the lower sigmoid with abscess which has burrowed through the levator ani and pointed on the buttock so that the injection of every chronic, recurring, complicated fistula in ano is advisable before operation.

A review of the last 12 cases shows that we had to resort to eight different maneuvers in their management. I know of no abdominal ailment which calls for more individualization and taxes one's surgical ingenuity more than diverticulitis and its complications.

THE SURGICAL TREATMENT OF EPILEPSY

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EPILEPSY has been defined as a condition in which there occurs a periodic paroxysmal discharge of nervous elements. Ample confirmation of this interpretation of seizures has been supplied recently by Gibbs, Gibbs and Lennox,[1] and by other investigators. These workers, employing a technique introduced by Berger in 1929[2] and amplified by Adrain and Matthews[3] have recorded the changes in electrical potential that occur in the brains of normal individuals and of epileptic patients. By means of sets of electrodes placed over the scalp of subjects it is possible to lead off, through radio amplification tubes, the minute electrical changes that accompany cerebral activity—converting them into potential changes of sufficient strength to actuate ink-writing oscillographs. The oscillographs produce on strips of paper permanent records of the changes in electrical potential which accompany various normal and pathological states.

Lennox and his co-workers have been able to show characteristic changes in the wave forms occurring in patients suffering from grand mal, petit mal, and from so-called "psychomotor epilepsy" (seizures which are characterized by abnormal mental states). The normal patient has a regular rhythm which gives evidence of the normal changes in the electrical activity occurring in the brain of the subject. Epileptic patients show characteristic cerebral "dysrhythmia". Thus it may be seen that a seizure is represented by an abnormal nervous discharge and the discharge varies in its manifestations from those seen in the profound disturbances occurring in some forms of so-called idiopathic epilepsy to the lesser changes accompanying isolated twitchings of the fore finger, which may be seen for example in cases with cicatrix involving the pre-central or motor gyrus.

It is important to recognize at the outset that epilepsy is a symptom complex and not a disease of itself. It is a symptom of a primary cerebral disorder, though the state is influenced, it is true, by the general body state, for the effects of alcoholism, constipation, etc., on the epileptic patient are well known. Nevertheless, it must be emphasized that the primary disturbance responsible for seizures is a disordered state of neuronal function, and that its site is within the brain. It is now becoming apparent that by elaboration of the electroencephalographic technique it is possible to localize the focus from which originates the abnormal rhythm. Such localization of seizure foci have just been reported by Gibbs and Williams[4] and by Bucy and Case[5]. The clinical importance of this work may prove to be great for it appears that it will be of appreciable help in determining the site of abnormal physiology and presumably of the underlying pathological process, which may in certain instances be susceptible to surgical removal.

Any paper purporting to deal with epilepsy from a surgical viewpoint should properly include a consideration of brain tumor, but in this instance we are deliberately omitting such a consideration and shall confine ourselves to those seizures resulting from cerebral cicatrix as opposed to neoplasm.

It is the purpose of this paper (1) to trace briefly the development of present conceptions in the treatment of surgical epilepsy, (2) to indicate what cases may be suitable for surgical intervention, (3) to state the diagnostic methods by which these special cases may be sorted out of the larger group of epileptics, (4) to describe the operative technique and (5) to present what statistics are available concerning the results of surgical therapy.

In Stephen Paget's life of Sir Victor Horsley[6] there is described an historic case. Sir Victor is, as will be recalled, justly considered the father of neurosurgery. The following quotation is taken from Paget: "The date of this first operation in Queen Square (London, England), is May 25, 1886. The patient, a young Scotsman, age 22, had been run over when he was seven and had been in the Edinburgh Royal Infirmary . . . with a compound fracture of the left side of the skull and escape of brain substance. At the age of 15 he began to have fits. He was in Queen Square in 1885 and was re-admitted in 1886. The mind was dull, there was partial paralysis of the right arm and leg and the fits were of extraordinary frequency: he had 2,870 fits during his first 13 days at the hospital. The "march" of the fits was well defined. The gap in the skull from the original injury lay over the upper third of the left ascending frontal convolution. The diagnosis was 'scar involving the hinder end of the superior frontal sulcus'. Horsley removed the scar in the brain and the surrounding brain substance to a

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depth of 2 cm. The wound healed well: the mental condition was improved; and the fits ceased." The clear reasoning of Hughlings Jackson had led him to postulate focal lesions as the cause of seizures possessed of "local sign"[7] and this physiological thinking had laid the groundwork for the recognition of such cases as Horsley undertook to treat. It must have taken no little courage in 1866, fifty-two years ago, to expose and remove such a lesion. It might be said in passing that Horsley's courage was not sheer surgical bravado. This, his first cranial operation in the human subject, was preceded by several years of experimental surgery on the monkey—years in which he gained knowledge of technique and cerebral physiology, which permitted him to pioneer this field with exceptional skill and insight.

In the ensuing years many similar attempts were made to treat such cases (Krause[8]) but the next great step in the understanding of focal epilepsy came as one of the few profitable by-products of the World War. Otfrid Foerster, the German neurosurgeon, became interested in the surgical excision of the cerebral cicatrices resulting from war wounds. In 1924[9] he published a monograph in which he described the changes in ventricular configuration demonstrable by encephalography. He coined the term "Narbenzug" or scar-pull to denote the traction-like effect that contracting scar tissue has on the ventricular system. He, like Horsley, postulated that the contracting scar was the local irritant factor leading to Jacksonian seizures. The following case (Foerster and Penfield[10]) serves to illustrate a typical example. K. W., a 28 year old soldier, whose mother suffered with seizures, was struck October 20, 1918, in the right parietal area by a grenade splinter. He was not rendered unconscious but the left side was immediately paralyzed. The wound was debrided promptly but he was confined to bed until March, 1919. In July, 1919, he began to have seizures; these became more frequent and more severe until he was admitted to Professor Foerster's service in April, 1929, in status epilepticus. Encephalograms demonstrated a widening and pulling up of the right lateral ventricle. A typical attack was characterized by head and eye turning to the left followed by trunk turning and flexor movements of the left arm. The convulsion then spread to involve the entire body. The point of importance in this sequence is that the seizure fired from a focal area and then spread to involve other structures in the brain which in turn fired off other portions of the body musculature. It was possible by working out the pattern of the attack in reverse fashion to predict from the initial movements of the seizure from what area in the brain the attack had begun. Other examples of local lesions in different areas of the brain, giving rise to seizures of definite pattern, might equally well be cited, but the one illustration suffices to define the general conception, i.e., that seizures which begin with isolated movements (or even specific sensory aurae) are in all probability firing from focal areas of brain damage.

A series of papers by Penfield and his coworkers[11] has demonstrated the changes in the supportive structures of the brain that occur as the result of trauma. More recently, from the same laboratory, have appeared two papers[12, 13] which show clearly that interference with normal cerebral circulation plays a very important role in cicatrization, and that a relative want of oxygen leads to a hypertrophy of the glial and connective tissues which form the supportive framework of the central nervous system. It is further now becoming clear that there are histological elements common to the lesions resulting from trauma, from intracerebral hemorrhage, from some forms of vascular occlusion, and from infection. All of these agents may lead to focal scar formation, and in susceptible individuals focal scar formation results in focal epilepsy.

What are the standards of selection for cases which may be amenable to surgical intervention? The first requirement is that the seizure be of such a nature that it can be assumed to be firing from a focal point. It might then appear that any generalized seizure would be excluded from consideration at the outset. This, however, is not always so, for it is conceivable that a seizure firing, for example, from one of the frontal poles, might work up its abnormal cerebral rhythm in a silent area of the brain and that the seizure would then spread rapidly, firing off the entire body musculature at one time. It is the usual rule, however, that cases of generalized seizures less often prove susceptible to surgical intervention. One usually expects to find definite evidence of a pattern in the attack. For example, head and eye turning to one side, or eye turning alone, are characteristic of discharge from areas lying anterior to the pre-central or motor gyrus. Similarly, isolated motor movements of the extremities are of extreme importance because they may well indicate firing from a local lesion in the motor gyrus. Sensory aurae are also of significance. For example, well formed visual hallucinations are indicative of a disturbance in the higher visual centers lying in the posterior temporal and in the occipital areas. Therefore, it is essential to analyze carefully both the subjective and the objective course of events in the patient's seizure, and thus there may be sorted out by detailed analysis signs which indicate the initial area of abnormal discharge.[14, 15]

The second criterion for the selection of cases suitable for surgical intervention is the pneumoencephalographic evidence of focal damage. Lumbar puncture is done, and air (or other gas) is exchanged for cerebrospinal fluid. X-rays of the head are then taken and from a careful study of

the gas-filled spaces—ventricular and meningeal —it is often possible to predicate an area of focal destruction. In more extreme cases, actual pulling of the ventricle toward the site of the scar may be demonstrable. In other instances the ventricular changes may be due to atrophy associated with a minimum of scar tissue formation.

A third criterion, which is only just being fully developed,[4, 5] is the finding at the site of suspected pathology of variations of electrical potential characteristic of epileptic discharge. As already indicated full use of this method depends upon further elaboration of the methods of electro-encephalography. In those cases in which these various fields of evidence suggest a focal lesion, exploration is justified. However, before radical excision of the suspected area is undertaken, a fourth criterion should be met—namely, the production of a characteristic seizure by carefully controlled electrical stimulation of the exposed cortex. Finally, any case should have before operation is seriously considered, a thorough trial of luminal or other sedative therapy, partly to avoid unnecessary operation, partly to prove that any post-operative sedation employed is not the cause of post-operative improvement rather than the operation itself.

This is not the place to go into great detail concerning the operative technique. The aim of operative intervention is to excise the damaged area of brain, leaving as the result of surgical intervention a lesser degree of damage than was caused by the original injury. This involves on the part of the neurosurgeon an understanding of the anatomical arrangement of the blood vessels and of the physiology of collateral circulation. Even more, perhaps, is involved a thorough knowledge of neurology for fine judgment may be required in settling the question of what areas to excise and what not to excise. In some instances a hard bargain must be driven between the relative value of the probable freedom from attack and a possible loss of function, such as the homonomous hemianopia resulting from operative removal of one occipital pole.

What has surgery to offer in the treatment of focal epilepsy? The best figures available on the results of radical excision of cerebral cicatrix are those of Penfield who in 1935 reported at the International Neurological Congress in London the following statistics.[15] In the preceding six years he and his associate, Dr. William V. Cone, had performed 75 major craniotomies for seizures (exclusive of neoplasms, hemorrhage, or brain abscess) and including negative explorations. Thirty-two per cent of these patients were attack free at the time of his writing—attack free for periods ranging from six years to a few months. There were in this group two operative deaths. Put in another way, there were 22 cases of radical excision of meningo cerebral cicatrix. Forty-six per cent of these were attack free and 32 per cent were markedly improved. There were also 22 cases of radical excision of focal atrophy and focal cerebral cicatrix. Of these cases 41 per cent were attack free and 32 per cent were markedly improved.

Obviously it is unfair to draw a **final** conclusion from such statistics in which many of the patients have not passed the five year period—which period of itself is not too rigorous a criterion of cure. Furthermore, the results of other operative procedures must also be considered. In an unpublished review of this question made in 1930[16] I could find no comparable results obtained by any of the other forms of direct surgical attack upon the brain. The results of radical excision of cerebral cicatrix are, in my opinion, such as to justify further intelligent and critical pursuit of the problem.

In summary, many forms of epilepsy are due to focal lesions in the brain, as evidenced by the pattern of the attack. In some of these the responsible lesion may be amenable to surgical removal, and following the removal there may be expected in a goodly percentage complete freedom from attacks, in other cases considerable relief in frequency or severity of seizures may be anticipated. Therefore it is important to be on the watch for focal seizures and to give cases suffering from focal seizures the benefit of thorough investigation, so that suitable cases may be selected for operative intervention with its reasonably good promise of relief or improvement.

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MEMBRANES

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MUCH has been written on induction of labor by artificial rupture of the membranes, with or without the aid of castor oil and quinine, enemas and pituitrin, but very little as regards to shortening the first stage, after labor has started spontaneously. It is, therefore, the main purpose of this paper to try to prove that, even though the "bag of waters" is a hydrostatic wedge in most cases, it fails greatly in others and is often a hindrance, rather than an aid in dilatation.

From our earliest obstetrical teachings we have been taught that the "bag of waters" plays the principal role in the dilatation of the cervix, but for the last 15 years this theory has been seriously attacked and discarded by a great number of men, among whom are Slemons, King, Plass, Mathieu and Holman, and whose studies on the induction of labor, by artificial rupture of membranes, have given ample evidence that labor is greatly shortened. However, in this paper we are interested in the prolonged first stage of labors, which started spontaneously.

The belief of the hydrostatic wedge originates from the old principle of physics—that pressure exerted on a closed body of water is exerted equally in all directions. But in the case of the amniotic sac, being made up of the very thin amnion and thicker chorion, which is attached to and completely lines the uterus, there is an opening in its covering—namely, the cervix. Therefore, when the muscles of the fundus of the uterus contract, naturally this opening offers less resistance and the fluid pressure, consequently, is directed downward toward the outlet. The membranes, normally being quite elastic, stretch under this increased internal pressure and as a result the lower uterine segment becomes very thin and the internal os, as well as the cervical canal, dilates and becomes obliterated. As labor progresses, this elastic bag under increased pressure of the ever increasing labor pains, stretches still more and bulges through the external os with pronounced tension. This can be felt very plainly, either by rectal or vaginal examination. This is what has been termed the hydro-static wedge and as long as it bulges through the os, (due to the elasticity of the membranes), the wedging force against the cervical muscle, accompanied by the retraction of the longitudinal muscle fibres of the lower uterine segment, gradually and evenly dilates the cervix until full dilatation, through which the head descends to be delivered subsequently. This has been, and is, termed the normal mechanism of the first stage. Unfortunately, this normal mechanism is not always followed, due, mainly to one of two abnormal conditions, or both—namely, inelasticity of the membranes, or an abnormally small amount of amniotic fluid ahead of the presenting part. Probably, inelasticity plays the more important part.

This can plainly be seen when one visualizes a very thick, dense, tough chorion, which is firmly attached to the uterine wall down to the margin of the internal os, resisting the powerful downward fluid pressure at each uterine contraction, instead of the small area of elastic membranes, over the os, yielding readily to the intermittent increasing pressure of labor. It may slightly press against the lower uterine segment, thereby softening and slowly dilating and obliterating the cervical canal, and in some cases, after hours may even dilate the external os to the size of one or two fingers and then remain unchanged for many more hours in spite of severe first stage contractions, until the internal pressure becomes greater than the tensile strength of the membranes and they rupture spontaneously, or are artificially ruptured.

The other abnormal condition, namely an abnormally small amount of water ahead of the presenting part, is also very often seen. In this case, as the head is being pushed down into the pelvis by strong, first stage contractions, due to a misfit as it were, between the head and the birth canal, the fluid preceding the head is allowed to escape backward into the fundus of the uterus, a very small amount, or even no water at all, remaining between the head and the membranes. This, of course, causes an area of some 120 square cm. of solid head surface to be forcibly pressed against the same area of resistant membranes over the cervix. With each uterine contraction the head is forced downward toward

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the outlet, the same as the hydrostatic wedge, but the head, being a solid body, instead of a fluctuating mass, does not cause the membranes to stretch and bulge to their full extent, hence, their point of elasticity is soon reached and but little dilatation is accomplished. Even though labor were allowed to go on for hours, these resistent membranes would prevent the head from descending against the cervix and prohibit further dilatation until they would or would not be ruptured.

From this time onward the presenting part, for example the head, drops tightly against the cervix and causes the full force of each contraction, which becomes much stronger, to be exerted against the cervical muscle and also allow the muscular retraction to take place, thereby promoting very rapid and safe dilatation.

CASE REPORTS

Allow me to give two case reports which will, I believe, demonstrate my contention.

Mrs. H. Para I, age 25 who had had a normal pregnancy in every respect. Physical examination showed nothing pathological and her pelvic measurements were normal. On April 2, 1937, which was, approximately, the estimated due date, she started in labor at 4:00 A.M., with moderate pain every 10 minutes. She was admitted to the hospital at 8:15 A.M., with these same pains and after two SS enemas they became every four or five minutes, lasting 40 to 50 seconds and more severe. At 9:30 A.M. she was two fingers dilated. Another rectal examination at 11:40 A.M. showed still two fingers dilated and pains even harder than before. Therefore, a vaginal examination was done at 12:40 P.M. and the cervix was found to be two fingers dilated and quite soft. At the height of a contraction the membranes became very tense and directly behind and again could be felt a soft irregular presenting part—the breech—at the same time this soft cervix could be moved freely back and forth over the presenting part, showing the membranes were not allowing it to come in contact with the cervical muscle. The membranes were then ruptured (at 12:40 P.M.) At 2:00 P.M. (one hour and twenty minutes later), under analgesia, she showed signs of second stage, a rectal examination showed full dilatation and breech L.S.A. in mid-pelvis. This was converted into a double footling and delivered easily at 2:58 P.M.

Mrs. E. Para II, age 34, who also had a normal pregnancy and no pathological findings on physical examination and the pelvic measurements were normal.

On March 12, 1937, which was one week past her due date, she started in labor at 4:00 P.M. with pains of fair quality every five minutes. She was admitted to the hospital at 6:10 P.M. with good contractions every four or five minutes, lasting 30 to 45 seconds. F.H. 128 and one finger dilatation, with the head at brim of pelvis. Two SS enemas were given and the contractions became every two or three minutes, lasting 50 to 70 seconds and severe; solution amytal grs. IX, was given at 7:20 P.M. Pains became very severe and nitrous oxide and oxygen started at 9:15 P.M. Rectal examination at 11:00 P.M. showed still two fingers dilatation and at 1:10 A.M. she had not advanced above two fingers, but the head had come down to mid-pelvis. A vaginal examination verified the dilatation and at the height of a contraction the membranes became very tense but did not press against the cervix, which could be easily moved to and fro—in fact—a finger could be placed between the bag and the cervix. The membranes were then ruptured at 1:30 A.M. The head immediately, with the next few pains, came tight against the cervix. At 3:00 A.M. (1½ hours later) she was pushing with full dilatation and the head was down to low-mid pelvis in R.O.P. position. She was delivered by modified scanzoni maneuver and low forceps at 3:47 A.M. Both mother and baby in good condition.

From my findings in a series of some 75 of my own private cases and staff cases at Maternity Hospital of University Hospitals of Cleveland, in which these two case reports were included, I have proved to myself that by artificially rupturing the membranes, in such obstinate cases as those described, as soon as a diagnosis of resistant membranes is made, the completion of dilatation from one to two fingers to the head on perineum was accomplished in from 25 minutes to five or six hours, depending upon the parity.

INDICATIONS

In determining the advisability for artificial rupture of membranes, during the first stage of labor, several findings must be considered.

The patient's labor should be followed closely as to the character of pains and dilatation of cervix, and when even with frequent and hard first stage contractions, the cervix reaches a known dilatation and progresses no further, the aforementioned possibilities should be anticipated. A very thorough, careful rectal examination should then be made at the height of a contraction. In contrast to the finding of a very tense, fluctuating bag bulging through and pressing forcefully against the edge of a well defined os, we find in the case of a very inelastic chorion, the membranes becoming very tense, but instead of bulging through they remain high in the lower uterine segment and the external os and lower cervical canal can be moved freely over this tense sac with the examining finger, giving the positive impression that the bag does not come in contact with the cervix. In the case of too little fluid in front of the head the same findings are observed, except the cervix is as freely movable over the head and membranes.

CONTRA-INDICATIONS

Probably the most important contra-indication to rupturing the membranes is a floating head, because of the possibility of some disproportion between the head and the pelvis and also of the grave danger of a prolapsed cord, the head should always be fixed or engaged. Another important contra-indication is a thick, firm cervix, or one that is pointing posterior into the hollow of the

sacrum, or markedly anterior toward the symphysis and of course, it should never be ruptured when there is a good bag bulging through the cervix.

TECHNIQUE

The patient is prepared as for delivery and every detail of aseptic technique carried out. The vulva is shaved closely and thoroughly scrubbed with green soap and sterile water, after which the area is painted with either aqueous or tincture of merthiolate, depending on whether or not the patient is lightly anesthetized with nitrous oxide and oxygen. Deep ether analgesia should never be used. She is then draped with sterile towels, the doctor, sterile gowned and gloved, catheterizes the patient and then does a careful vaginal examination to further satisfy himself of his rectal findings. The membranes are then freed from the region of the external os and, if possible, two fingers are inserted into the cervix. A straight hemostat is then moved down between the two fingers and gently grasps and tears, or punctures the encountered membranes and the examining finger opens, or tears the membranes more widely, allowing some of the fluid to escape. This may be done either at the height of contraction, or during relaxation. When the head is tight against the cervix and no water at all, do not hesitate to pull a few hairs from the baby's head to make sure the membranes are ruptured.

MORBIDITY AND MORTALITY

Many objections have been raised against this procedure. One, that the incidence of cerebral hemorrhage in the infant is greatly increased because of the direct pressure on the head in dilating the cervix, but this has been proved unfounded, because in my series there has not been one single case of foetal death or symptom of cerebral hemorrhage. In fact, the terrific continued pressure of a prolonged first stage would and has caused far more cerebral trauma. The incidence of laceration of the cervix has shown no increase in frequency. As to morbidity and mortality of the mother, there is great reason to believe that it should be lessened if rupture is done under strict asceptic technique because according to all authorities the longer the labor the less resistance to infection. Therefore, if the first stage can be shortened as greatly as has been shown, the resistance must still be high and morbidity lessened. This has been proved in my series, for there were no rises in temperature above 38° C. which could be attributed to this procedure and technique, and as for mortality, there were no deaths, either among mothers or babies.

CONCLUSION

In conclusion, I strongly feel that in cases of prolonged first stage labor, where there is no bony dystocia but an inelastic bag of membranes, or an abnormally small amount of, or no water at all, between the presenting part and the membranes which prevents that bag of water from pressing against the cervix, no matter what the parity or presentation might be one is justified in artifically rupturing the membranes and thus shortening labor by hours.

10515 CARNEGIE AVENUE.

DISCUSSION

J. L. Reycraft, M.D., Cleveland, Ohio: Dr. Mowry has presented a timely paper on the subject of rupturing the membranes to improve the progress of the first stage.

Many of you will be of the opinion that no interference should ever be tolerated, i.e. all should be left to nature. However, it has been our experience that such a practice leads to maternal exhaustion, fetal exhaustion, and increases the liability to maternal morbidity.

In 1933 it was my privilege to hear the late Delbert Jackson, of Boston, present 500 cases in which labor had been induced by rupture of the membranes. He was very emphatic in calling attention to the necessary prerequisites for the safe accomplishment of this type of induction. He emphasized that the head must be engaged, the cervix thin and dilatable; and the cervix must point anteriorly. These same fundamentals should be borne in mind in relation to the procedure which Dr. Mowry has brought to your attention today.

We must not forget that the use of morphine sulphate in labor will aid greatly in relaxing the cervix and if this be combined with the rupture of the membranes the labor may progress more rapidly in many instances.

In some cases a long hysterectomy clamp or Allis forcep may be more convenient to use in the rupture of the membrane than a straight hemostat. Naturally this procedure must be performed with strict surgical technic.

It is very important to select proper cases for the early rupture of the membranes and best results are accomplished when as much fluid is drained out as possible.

Lack of elasticity of the membranes is doubtless the most important reason why labor does not progress in cases in which the presenting part is engaged, and the membranes are not tightly against the cervix. Unfortunately there is no way to increase the elasticity of the membranes, so that the only thing left to do is to rupture them, which permits the forces of labor to be exerted upon the presenting part which becomes the dilating wedge, whether this be breech or vertex.

A List of 16 Diseases

Which Genital Mucous Lesions of Early Syphilis May Resemble.

Herpes progenitalis, chancroid, erosive vulvitis or balanitis, Anal fissure, erythema multiforme, aphthous ulcers, venereal warts, trauma, carcinoma, pemphigus, granuloma inguinale, lymphopathia venereum, tuberculosis, scabies, lichen planus, hemorrhoids.

Examine the skin and mouth. Do a serologic test.—Supplement No. 5, Venereal Disease Inf., U.S.P.H.S.

TECHNIQUE FOR MASTOIDECTOMIES UNDER LOCAL ANESTHESIA

By MERLE EDISON SCOTT, B.S., M.D., F.A.C.S., Massillon, Ohio

THERE occurs often in the practice of oto-laryngology, mastoiditis following a severe coryza. At the same time there may be pulmonary complications such as pneumonia, and pleurisy, or moist lungs during or after measles. Under such circumstances a general anesthetic for a mastoidectomy is a serious and perhaps, a fatal risk. We face the problem confronting us of doing a mastoidectomy without aggravating the original condition which caused the mastoiditis.

There still remains a way out of the difficulty by local anesthesia, such as the procaine (novacaine) method, supplanted by avertin or nembutol, or the use of procaine with morphine and atropine.

The patient is prepared in the usual way with due attention to catharsis, etc. The operative field is prepared with the greatest care, the hair line a little higher so as to give plenty of room for the penetration of the anesthetic. The method of injection must be carried out faithfully by the method of circum-injection, entirely around the ear, then injections below the ear, over, and anterior to the mastoid process. This catches the occipital, and auricular nerves. An injection is made deep around the auditory canal after the ear is pulled forward.

After the area is carefully infiltrated and the proper time has elapsed for anesthesia, the incision is made and the operation is performed in the usual manner, with this exception, the mastoid drill and burrs are used instead of chisel and mallet. The operation on the bone is first, free from concussion, and second, absolutely painless, except in the region of the mastoid antrum, where tenderness, and pain will be experienced unless care is used in going slowly and cautiously.

It has been my experience that a mastoidectomy under local anesthesia can be done just as easily as under general anesthesia, if the operator is willing to take the time for infiltration, and will wait until complete anesthesia has taken place. After all, the time consumed is no longer than it takes to induce general anesthesia. The patient is not in shock and is fairly comfortable, except possibly tired from lying in one position, as the time consumed in doing the operation is rather lengthy. The series of patients that I have operated upon, have been carefully questioned with regard to pain, and discomfort. They compare the sensation experienced when the mastoid burr is used, "like unto a tooth under nerve block that is being drilled out by a dentist."

I very much doubt that a local mastoidectomy can be done without a great deal of discomfort and pain, even under a good local anesthetic if chisels, gouges, and mallets are used, as the amount of pounding that would have to be done would be unbearable. This is the best argument there is for the use of the mastoid drill and burr. I have used the drill and burr method for 13 years and find it to be the most useful tool in my armentarium in doing mastoids, and antral work. I would rather give up almost any other instrument that I possess than my drill and burrs. One only has to use it once to be convinced of its usefulness and ease of operation. There are no concussions or headaches following as when the chisels and mallets are used. It is almost like asking a dentist to stop using his drill and hollow out the cavity of a tooth in the old way of chiseling and scraping.

The argument will be used that gas anesthesia could be employed. It is true, it could, but in a very ill patient and an hour's anesthesia, cannot be other than a detriment to a "moist lung", especially one following pneumonia. Below I cite two cases that are admirable examples where local operations were not only indicated but demanded.

Case No. 1—Mr. K. W., 45 years, became suddenly ill with what he called the "grippe", high temperature, acute inflammation of nose and throat, and no appetite. Two days later he had violent pain in the left ear. After 10 hours duration the patient sought relief, and a paracentesis was done. The discharge was extremely copious, but hemorrhagic in type. He was removed to the hospital for observation, due to the fact that he lived at a distance from our city.

He developed pains in his chest and a severe cough, and voided urine loaded with albumin and blood. After four days of watching and in spite of the copious discharge, the pain in the ear and left side of head continued. Upon roentgenologic examination there showed a very extensive and diseased mastoid which was later confirmed by operation. The patient was given morphine sul-

The Author

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phate grains ¼, and atropine sulphate, grains 1/150, and operated locally, as described above.

The bacteriological examination showed a mixed infection streptococci and pneumococci. I feel reasonably sure that had this man had a general anesthetic, of any kind whatsoever, he would not have recovered, or at least, without severe complications.

Case No. 2—Mr. K. B., 22 years, student. Six weeks previous to my seeing him he developed lobar pneumonia. He was handled very skillfully by an internist, but an otitis media developed in his right ear, which advanced into a severe mastoiditis. This was excusable as the condition in the lung over-shadowed the otitic lesions.

The mastoid had ruptured, subperiostial, which incidently as you know, is a very belated stage, and also quite rare in adults. The pulmonary condition had not quite cleared up, the cough remaining, and he was weak and emaciated. This patient was given morphine sulphate, grains ¼, and atropine sulphate, grains 1/150. The operation was concluded in approximately one hour with the use of the burr, and he felt reasonably comfortable and made a rapid convalescence, leaving the hospital in six days.

RESUME

A definite technique is needed for mastoidectomies under local anesthesia where from some pulmonary or kidney complication, a general anesthetic of any nature whatsoever in contraindicated. This coupled with the mastoid drill, and burrs, relieves the patient from all excruciating pain due to hammering and chiseling and fits the situation to a nicety.

FIRST NATIONAL BUILDING.

DISCUSSION

Henry M. Goodyear, M.D., Cincinnati, Ohio: It has been my practice during the past 10 years to operate on infants, where a mastoidectomy is indicated, with a local anesthesia. The infant may be given a small dose of elixir of luminol, or 1/60 gr. of morphine hypodermically. A gauze saturated with sugar water may be sucked by the child as a pacifier during operation, and the regular feeding schedule is not disturbed, if the operation is so timed. Many of these infants go to sleep during the operation after a careful injection of one per cent novocain.

I never use a chisel in local anesthesia, whether it be in the case of an infant or adult. Theoretically, it seems possible, that petechial hemorrhage may be produced in the cochlea or labyrinth by the sharp percussions of the chisel and mallet, and their limited use, or abandonment, under local or general anesthesia is to be encouraged.

In infants a Spratt curette is held at an angle, firmly between the left thumb and forefinger, to prevent a forward thrust, and with a rotating motion of the right hand, grasping the handle, an opening is made through the cortex, and enlarged with curette and rongeur.

In an adult the tip of the masoid is well uncovered, and with a large rongeur the tip is bitten away, and cortex removed in an upward direction after undermining with a curette. Remember that a very large and perfect rongeur is necessary to do this successfully. Too little attention is given to perfect cutting instruments, and their care.

In cases of very sclerotic mastoids I have found the brace, as used by the brain surgeon with a perforator bit and a modest burr, is a safe and very helpful instrument in opening directly in the region of the mastoid antrum.

The Pathogenesis of Coronary Thrombosis

The recent studies afford a basis for a hypothesis as to the origin of coronary thrombosis. The inhibition of cholesterol and related fatty substances disturbs the smooth contour of the arterial lumen. There is deposited thereon fibrinoid material, possibly a condensation product of the blood stream. The reparative process designed to maintain functional integrity leads to scar tissue formation and capillary growth. The new capillaries are subject to the high pressure existent within the coronary system since they arise directly from its lumen. Persons in whom this pathologic process develops are likely to have hypertension; even if no hypertension is present they may suffer periodic attacks of increased blood pressure. Under the strain of present day living there is frequent occasion for emotional disturbance. In persons between the ages of 45 and 65 a high degree of calcification has not ordinarily taken place; hence these new capillaries are likely to be dilated where they pass through nonrigid supporting structures.

The continued assault of pressures greater than the new capillaries were designed to withstand may lead to rupture. The extravasation of blood may be so great as to occlude the lumen partially or completely. In the former instance symptoms associated with impaired myocardial blood supply may become manifest. In the latter instance the classical picture of acute coronary thrombosis may supervene. Under some circumstances it is not improbable that the intimal hemorrhage destroys the continuity of the intimal surface, in which event thrombosis formation will follow as it would follow the destruction of arterial integrity elsewhere in the body.

These studies emphasize the importance of the regime prescribed for patients exhibiting the coronary syndrome. Rest and the avoidance of excitement are to be insisted upon. Measures designed to reduce the blood pressure and to prevent its periodic exacerbation are in order. At this time there is no reason to prohibit cholesterol and fatty dietary ingredients in the blind hope of preventing the atherosclerotic process. Caution in the handling of patients presenting this syndrome is commendable. In the more aggravated instances a period of bed rest with appropriate sedation may prevent the occurrence of the classical attack of coronary thrombosis. The extension of studies such as those here discussed may lead to the development of still better preventive measures.—Editorial, The Jour. of the Mo. State Med. Assn., Vol. 35, No. 9, Sept., 1938.

THE TREATMENT OF PRENATAL SYPHILIS

By E. W. NETHERTON, M.D., CLEVELAND, OHIO

SYPHILIS acquired in utero is usually called prenatal, congenital, or heredosyphilis. Congenital syphilis is the term most frequently used, but strictly speaking, it should be applied to an acquired form of the disease which is contracted by the fetus as it passes through the birth canal. Heredosyphilis is also an inaccurate term because the disease is not inherited. Since the disease is acquired during fetal life the term prenatal is the most accurate and is preferable; however, common usage has made these terms synonymous. As in acquired syphilis, the incidence of prenatal infection varies with the race and social status of the patients studied. The incidence also varies with the ages of children, the incidence of infants being higher than in older children. Jeans and Cooke[1] have suggested that the high mortality in infants with syphilis probably accounts for the variation of the incidence of syphilis in infants and children. In a study of 5,185 infants and children they found that 4.9 per cent of the infants and 1.5 per cent of the older children had prenatal syphilis. The American Social Hygiene Association[2] places the incidence of prenatal syphilis at 3 to 4 per cent. Surgeon General Parran[3] of the United Public Health Service states that, in this country, 60,000 syphilitic infants are born each year. These figures, although admittedly not absolutely accurate, are appalling and should be considered as an indictment against society because it has been definitely established that prenatal syphilis is practically a preventable disease.

The proper way to combat the disabling manifestations of syphilis is to prevent them by adequate and intelligent treatment of every patient with acute syphilis. If such a course could be followed, the incidence of infections would be enormously decreased and this in turn would decrease the number of prenatal syphilitics born each year. A greater effort must be made to prevent infection of the potential mother by an inadequately treated syphilitic husband. It is not uncommon for the birth of a syphilitic infant to be the first intimation of the presence of syphilis in the family; therefore, it is important to rule out syphilis in the expectant mother. In the majority of cases, this can be done by the repeated use of routine blood tests.

Since prenatal syphilis is acquired in utero, its prevention and its early treatment can be accomplished only by treatment of the expectant syphilitic mother. Consequently the therapy of prenatal syphilis is divided into two types, (1) antenatal, and (2) postnatal treatment.

Read before the Section on Pediatrics, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

The Author

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ANTENATAL TREATMENT

The rationale for the early and adequate treatment of the expectant syphilitic mother in order to prevent, as well as to institute early treatment of prenatal syphilis, is based upon the generally accepted theory of transmission of the disease through the placenta. Spirochetes in the maternal circulation are implanted on the maternal side of the placenta, eventually invade the fetal placenta, and thence pass into the fetal circulation. During the primary and secondary stages of acquired syphilis, there is a marked spirochetemia but when the disease has become latent, either spontaneously or as a result of treatment, the spirochetes disappear from the blood stream. If an expectant mother acquires syphilis, the fetus will become infected, but a pregnant woman who has latent syphilis may or may not give birth to a syphilitic infant. It must be assumed that periodic spirochetemia occurs in latent syphilitics and that, when a woman with latent syphilis gives birth to a non-syphilitic infant, a spirochetemia did not occur during the pregnancy or, if the spirochetes did enter the maternal circulation, none were implanted in the placenta. All the factors which influence the frequency and severity of the periods of transient spirochetemia of latent syphilitics are unknown; however, the duration of infection, the efficacy of the body defense mechanism of the infected individual, and the type and amount of anti-syphilitic treatment which the patient has received, particularly during the early stage of the infection, are important. The older the infection in a syphilitic woman, the less likely is she to give birth to an infected child.

The fetus may become infected during any month of gestation. Jeans and Cooke[1] state that evidence of an infected fetus is seldom apparent before the fifth month of pregnancy and more frequently after the seventh month. Regardless of the period when syphilitic lesions are most frequently observed in the fetus, numerous observers have shown that adequate treatment of an ex-

pectant syphilitic mother, when begun not later than the fourth or fifth month of pregnancy, will usually insure the birth of a nonsyphilitic infant. Apparently, periods of spirochetemia in the mother with latent syphilis are prevented by adequate treatment which is begun early in pregnancy. Wile[4] states, "The intelligent treatment of a syphilitic mother and the effect of this treatment on the unborn child, as carried out along modern lines, represents a most gratifying stride towards therapeutic effectiveness." The studies of the Cooperative Clinic Group[5] showed that treatment of pregnant syphilitic women with at least 10 and preferably 15 injections of an arsphenamine and an appropriate amount of heavy metal, started before the fifth month of pregnancy, resulted in 91 per cent of apparently nonsyphilitic infants at birth. In the patients in whom treatment was started after the fifth month of pregnancy, only 79.3 per cent of the infants were apparently free from infection at birth.

Wile[4] has emphasized the necessity of including heavy metals in all schemes for the treatment of syphilis. His contentions are supported by the findings of the Cooperative Clinic Group[5] that, when treatment was begun after the fifth month of pregnancy, twice as many syphilitic infants were born when the appropriate amount of heavy metal was not administered. This group also found that a pregnant woman whose blood test is positive is much more apt to bear a syphilitic child than is a syphilitic woman with a negative blood test.

It cannot be denied that treatment of syphilitic pregnant women started early in pregnancy is the best way to treat or to prevent prenatal syphilis. This fact should be emphasized frequently. As in acquired syphilis, it is important to start treatment as soon as possible after infection has occurred. In prenatal syphilis this principle can be followed only by treating the expectant syphilitic mother because the initial syphilitic focus in the placenta may, for practical purposes, be considered as the primary lesion from which the spirochetes rapidly enter the fetal circulation. Antisyphilitic drugs are transferred from the maternal circulation to the placenta and from there into the fetal circulation; therefore, treatment of the expectant syphilitic mother serves as a treatment for any syphilitic infection which may exist in the fetus. Adequate treatment begun early in pregnancy may produce either a radical cure in the infected fetus or, if treatment is started late and this is not accomplished, the severity of the disease in the newborn will be greatly decreased, thereby enhancing the infant's chances of surviving the severe toxemia of the secondary stage of its disease.

There is no way of determining which untreated expectant syphilitic mother will give birth to a healthy child; consequently treatment should be given during each pregnancy of a syphilitic woman, irrespective of the serologic findings, the duration of the infection, or the amount of treatment which has been previously received.

Antenatal treatment is very important in the prevention and management of prenatal syphilis, but its maximum benefit cannot be achieved unless the obstetricians and the practitioners are syphilis-conscious and make every effort to detect a possible syphilitic infection in every pregnant woman who comes under their care. The examination of every pregnant woman should include routine blood serologic tests. In this regard, it must be borne in mind that a negative finding with one pregnancy does not obviate the desirability of repeating the test with each subsequent pregnancy.

Should all infants of untreated syphilitic mothers be given antisyphilitic treatment, and if so how soon after birth should treatment be started? The early diagnosis of syphilis in the newborn child of a syphilitic woman is frequently very difficult. The clinical manifestations of prenatal syphilis seldom appear before the third or fourth week of life and the serology of the blood obtained from the umbilical cord is not always a reliable indication. A positive serologic reaction in blood from the cord does not always mean that the child is syphilitic and likewise a negative reaction does not rule out syphilis. Some observers feel that all offspring of untreated syphilitic women should be treated while others believe that treatment should be given only to the infants in whom clinical or serologic evidence of syphilis develops. If all offspring of syphilitic mothers are treated, many children will be given unnecessary treatment for it is definitely known that untreated women with latent syphilis may give birth to healthy infants.

Cregor and Dalton[6] have recently reviewed this problem and reported their finding in 66 infants born of syphilitic mothers. These children were observed for an average period of 22.8 months and it was found that, in 22 children or 33.33 per cent of the infants whose blood gave a positive blood reaction at birth, clinical evidence of syphilis failed to develop and their serology became negative without treatment. These authors agree with other observers that complement fixing substances in the mother's blood may enter the fetal circulation without infection occurring in the fetus. The answer to this question is even more difficult in cases where the mother received treatment for early syphilis during her pregnancy. Wile and Shaw[7] feel that in these cases the prenatal treatment should be supplemented by postnatal therapy regardless of the serology and clinical findings in the newborn.

Antisyphilitic treatment should never be given

to patients suspected of having early acquired syphilis until a positive diagnosis has been established by modern laboratory procedures. This is a fundamental principle in the management of acute acquired syphilis and, with the possible exception of the offspring of women who have received treatment for early syphilis during their pregnancy, the same principle of treatment should be followed in the management of infants born of mothers with latent syphilis. If antenatal treatment has been adequate the newborn is almost sure to be nonsyphilitic, and if the newborn of a mother with untreated latent syphilis has prenatal syphilis, definite clinical or serologic manifestations of the disease will usually develop before the end of the second month of life. A short period of observation will not be harmful to the infected infant and rather than subject the nonsyphilitic infant to intense therapy it is best to withhold treatment until the presence of syphilis can be established.

If this policy is followed, it is imperative to keep the infant under close observation and repeated blood tests should be made during the first six months of life. If the clinical and serologic findings remain negative, the child should be examined periodically for two years. If signs of infection have not appeared, the child probably does not have syphilis.

POSTNATAL TREATMENT

Many physicians undertake the treatment of prenatal syphilis with an attitude of timidity and pessimism. This is due to the difficulty of using certain therapeutic procedures employed in the treatment of early prenatal syphilis and also because of the difficulty of achieving a reversal of the serology or of attaining a prompt and permanent clinical cure in children who present the late disabling manifestations of the disease. Likewise it is often difficult to obtain satisfactory cooperation of the parents. Because of these obstacles, infants and children with congenital syphilis are apt to receive cursory and inadequate treatment.

Although there are certain differences between the clinical manifestations of acquired and prenatal syphilis, the two conditions are fundamentally the same disease and the aims and principles of treatment of both are identical. A more comprehensive understanding of the therapeutic problems of congenital syphilis can be obtained by comparing the treatment of different stages of congenital syphilis with those of analogous stages of acquired syphilis. Moore[8] has emphasized the importance of making a distinction between the stages of the infection in congenital syphilis.

In the management of acquired syphilis the aims and principles of treatment vary with different stages of the disease and the types of clinical manifestations which the patient presents. The same is true in the management of prenatal syphilis. The stages of congenital syphilis are analogous to the early, latent, and late stages of acquired syphilis.

The cutaneous manifestations of prenatal syphilis which occur during the first few weeks of infancy are analogous to the secondary lesions of acquired syphilis. However, the constitutional disturbances and the cutaneous and visceral lesions are usually more severe in prenatal syphilis. The feeble body defense mechanism of the infected fetus is unable to prevent an intense dissemination of the spirochetes; therefore, in infants who have been deprived of antenatal treatment, there is apt to be a severe involvement of all the viscera and tissues of the newborn infant with syphilis. Such infants may be premature, suffer from malnutrition, and present symptoms of a severe toxemia. The mortality rate among infants of this type is high as they may die of syphilis or as a result of pneumonia or some other secondary infection to which they are particularly susceptible. In the less severe cases, the secondary manifestations of prenatal syphilis may be slight or go unrecognized; consequently the infection will pass into the stage of latency and, if untreated, some disabling manifestation of late congenital syphilis will probably develop during the first or second decade of life.

In the early stages of prenatal syphilis there is a severe spirochetemia and the viscera and tissues of the infant contain an infinite number of foci of rapidly multiplying spirochetes; therefore, the aims of treatment are first to save the life of the infant and to prevent infection of those who may handle the child and, secondly, to obtain a serologic and clinical cure. Since the disease is not firmly entrenched, the principles of regular, continuous, and prolonged treatment consisting of alternating courses of an arsphenamine and a heavy metal are indicated. The acute lesions heal rapidly after treatment is started and, if therapy is begun early and given regularly and continuously without rest periods during the first two years of life, the incidence of clinical and serologic cure will be high. Smith[9] states that early prenatal syphilis is curable and that the child has an 84 per cent chance of obtaining a serologic and clinical cure if treatment is started before the sixth month and if at least 25 injections of an arsphenamine and 25 injections of a heavy metal are given. However, it is best to give a minimum of at least five courses of neoarsphenamine as sulpharsphenamine and five courses of bismuth.

The age of the child when treatment is started and the amount of treatment given are the two most important factors in determining the ultimate results which are to be achieved. If treatment is started before the sixth month of life and if it is adequate, the incidence of relapses will be low. The infant suffering from malnutrition and severe syphilitic toxemia presents

A SCHEME OF TREATMENT FOR PRENATAL SYPHILIS*

Week		Sulpharsphenamine or Neoarsphenamine	Bismuth Salicylate	Remarks
	1	Sulph.—0.005—0.01 gm./kg. or Neoar.—0.005 gm./kg.		Blood test— Small initial dose to avoid therapeutic shock
(8)	2-7	Sulph.—0.025 gm./kg. or Neoar.—0.01 gm./kg.		
(6)	8-13		0.02 gm./kg.	
(10)	14-23	Sulph.—0.025 gm./kg. or Neoar.—0.01 gm./kg.		Test blood
(10)	24-33		0.02 gm./kg.	
(10)	34-43	Sulph.—0.025 gm./kg. or Neoar.—0.01 gm./kg.		Test blood
(12)	44-35		0.02 gm./kg.	Test spinal fluid
(10)	36-45	Sulph.—0.02 gm./kg. or Neoar.—0.01 gm./kg.		Test blood. Continue treatment for at least one year after blood and spinal fluid are negative.
(12)	46-57		0.02 gm./kg.	
(10)	58-67	Sulph.—0.025 gm./kg. or Neoar.—0.01 gm./kg.		Test blood
(12)	68-80		0.02 gm./kg.	Minimum treatment. If serology is positive continue treatment.
	81-133	Probation		Test blood every two months. Test spinal fluid at end of probation.

*Modified in accordance with the recommendation of Moore[8] and Cole.[13]

problems of feeding which require the expert knowledge of the pediatrician.

In acute prenatal syphilis, treatment is started with an arsphenamine and continued without rest periods, alternating with courses of heavy metal for at least one year after the blood and spinal fluid have become and remained permanently negative. The initial dose of arsenical should be small in order to avoid a therapeutic shock. The serologic response to treatment should be determined by a blood test at the beginning of each course of arsenical. A spinal fluid test should be taken at the end of the first six months of treatment and if the findings are negative it need not be repeated until treatment has been completed.

The importance of the findings on examination of the spinal fluid in determining the duration of treatment is an established principle in the management of early acquired syphilis and, as previously stated, is equally important in early prenatal syphilis. The mortality rate among infants with early neurosyphilis is high; however, some of the prenatal syphilitics who survive the early stages of their disease will enter the latent stage with asymptomatic neurosyphilis. It is this group of patients in whom juvenile paresis eventually develops therefore, treatment must be intensified and prolonged if a reversal of the positive finding in the spinal fluid is not achieved with the minimum of treatment previously mentioned. The incidence of neurosyphilis in late prenatal syphilis is approximately 10 per cent.

In latent prenatal syphilis the results of treatment are not so good; however, a clinical and serologic cure is not impossible. The incidence of serologic and clinical cures will be greater if treatment is started before the child is two years of age. Unfortunately latent congenital syphilis is not recognized in the majority of cases and no treatment is given until some of the stigmata or late manifestations of the disease develop. In 89.7 per cent of 267 cases of late congenital syphilis studied by Smith,[11] there was no history of manifestations of infantile syphilis. In children with latent prenatal syphilis, the blood practically always gives a positive reaction; therefore, as in adults, a blood test should be included routinely in the physical examination of all children and is obviously indicated in the children of parents in whom syphilis has been discovered.

In untreated acquired syphilis, latency of the infection tends to become more permanent with the duration of the disease, provided the infected individual has escaped a late involvement of the cardio-vascular and central nervous systems. The reverse is true in prenatal syphilis, for a large percentage of the children with untreated,

latent, prenatal syphilis may be expected to have one more of the crippling late lesions of their disease by the time they reach puberty. In latent prenatal syphilis a clinical and serologic cure is difficult and often impossible to achieve; consequently, the chief aim of treatment is to prevent the appearance of the distressing and devastating late lesions of the disease. Fortunately, this can be accomplished in most cases. Smith[9] found that a relatively small amount of treatment was as efficacious in this respect as was intensive treatment. However it is best to give adequate treatment in latent prenatal syphilis.

Interstitial keratitis is the most common of the disabling late lesions of congenital syphilis. It appears most frequently between the ages of 5 and 15 years but may be found in younger children or after the individual with prenatal syphilis has reached adult life. The value of treatment during the latent stage of prenatal syphilis, as a prophylaxis for interstitial keratitis, is demonstrated in the studies of the Cooperative Clinic Group[10]. They found that 38 per cent of untreated late prenatal syphilitics who first sought medical aid did so because of interstitial keratitis. In contrast to this, only 2 per cent of the patients who had received modern antisyphilitic treatment sought advice for interstitial keratitis.

In the absence of asymptomatic involvement of the central nervous system, the treatment of latent prenatal syphilis is considered to have been adequate if treatment has been regular, continuous, and at least five alternating courses of an arsphenamine and a heavy metal, preferably bismuth, have been given. Before starting treatment the spinal fluid should be examined to rule out asymptomatic neurosyphilis for, if there is involvement of the neural axis, the case cannot be classified as latent syphilis and the treatment must be more prolonged and individualized. It is not always possible to obtain spinal fluid early in the management of a case of latent prenatal syphilis, but it should at least be obtained before treatment is discontinued; otherwise the candidate for juvenile paresis cannot be detected during the asymptomatic stage of neurosyphilis.

With the exception of the prevalence of interstitial keratitis, dental abnormalities, and the extreme rarity of cardiovascular involvement, the late clinical manifestations of prenatal syphilis are similar to the late lesions of acquired syphilis. Nerve deafness, neurosyphilis, osteitis, periostitis, and synovitis are other diasbling lesions of late prenatal syphilis which are most commonly observed. Occasionally, gummata may develop in the skin and mucous membranes. With the exception of neurosyphilis, these late lesions seldom cause death, but of course, the suffering, disability, and economic loss which they cause is great.

In late prenatal syphilis, a clinical and serologic cure can seldom be accomplished; therefore, the aims of treatment are to attain satisfactory clinical results. The amount of treatment must be sufficient to relieve symptoms, to heal the lesions, and to prevent a relapse and the development of new lesions. The success of treatment is judged by the degree and permanency of the clinical improvement which is achieved. Wassermann fastness is common in late congenital syphilis and the incidence of serologic reversals is not increased materially by prolonged treatment. Prolonged and intensive treatment is often required to heal existing lesions or to arrest the progress of the disease. This is particularly true of interstitial keratitis and of juvenile paresis. As in late acquired syphilis the treatment must be individualized and in certain instances nonspecific therapeutic measures must be used as adjuncts to therapy with the arsenicals and heavy metals. The nerve deafness of congenital syphilis does not respond well to treatment, and often the deafness gradually increases, even with intensive prolonged treatment. Smith[11] has pointed out that in these cases the involvement of the eighth cranial nerve is usually not accompanied by involvement of the neural axis. Our experience is in accord with Smith's observations.

The prognosis in late prenatal neurosyphilis is poor. The treatment is similar to that used in acquired parenchymatous neurosyphilis. Fever therapy followed by intensive and prolonged treatment with standard methods should be employed. In young children it is safer to produce hyperpyrexia by the intravenous injection of typhoid vaccine, while malaria is the best type of fever therapy in late childhood and during adolescence. Tryparsamide should not be given to children who are too young to submit to an accurate examination of the eye grounds.

Interstitial keratitis is the commonest lesion of late prenatal syphilis and as previously stated requires prolonged and intensive treatment. Local treatment of the eye must not be neglected and if possible this phase of the treatment should be under the supervision of an ophthalmologist. Arsphenamine is the arsenical of choice and should be given in comparatively large doses in older children. Moore advises 0.1 gram per 25 pounds of body weight. In resistant or relapsing cases, routine treatment should be supplemented by fever therapy.

The treatment of late prenatal syphilis should be continuous and prolonged for at least two and one-half years and in cases of neurosyphilis and resistant relapsing interstitial keratitis, one hundred injections of an arsenical and appropriate heavy metal in conjunction with nonspecific therapy may be necessary.

Having discussed briefly the aims and principles of treatment of the various stages and

manifestations of prenatal syphilis, what plan of treatment should be used and what are the drugs of choice?

The modern treatment of acquired or prenatal syphilis embodies the cardinal principles of continuous and prolonged treatment consisting of alternating courses of an arsenical and a heavy metal. Rest periods which were universally allowed in the past are no longer permitted. A course of arsenical therapy consists of 8 to 10 weekly injections and a course of heavy metal consists of 10 to 12 injections of bismuth or 20 to 30 inunctions of mercury.

Sufficient care is not always exercised in estimating the dosage of antisyphilitic remedies for infants and children and, as a result, toxic manifestations due to overdosage develop. I have recently observed an infant with a bilateral wrist drop which appeared shortly after the administration of an excessive amount of sulpharsphenamine. The dosage of antisyphilitic remedies should be computed in terms of milligrams per kilogram of body weight. The amount to be given per kilogram of body weight varies with each drug. The physical condition of the patient must also be considered, and in infants suffering from malnutrition, the initial doses should be small in order to avoid a therapeutic shock. The size of the dose of antisyphilitic remedies which are well tolerated by infants increases with the age of the child until late childhood and during adolescence when the dosage is comparable with that used in adults.

The arsenicals are the most potent of modern antisyphilitic drugs and, as in early acquired syphilis, are especially valuable in the treatment of early congenital syphilis. Of the various arsenicals which possess spirocheticidal properties, the arsphenamines are the most effective and are universally recognized as the arsenical of choice in the treatment of the early and most of the late manifestations of syphilis. Arsphenamine or "606" is the most potent of the arsenicals but its use in infants is impossible as it must be given intravenouly; however, it is to be preferred in the treatment of interstitial keratitis which occurs late in childhood or during adolescence.

Neoarsphenamine and sulpharsphenamine may be given intramuscularly and therefore are the choice of arsphenamines for the treatment of early congenital syphilis. Several years ago, Fordyce and Rosen[12] found that the intramuscular injection of a neutral neoarsphenamine in conjunction with injections of mercuric chloride was a superior method of treating infants with syphilis. Others have found the intramuscular injection of neoarsphenamine to be a valuable method of giving an arsenical to infants; at present Cole[13] advocates the use of neoarsphenamine for the treatment of early congenital syphilis, in doses of 5 to 10 mgm. per kilogram of body weight, injected into the soft tissue of the side of the scalp.

Sulpharsphenamine is well tolerated by infants in doses of 5 to 25 mgm. per kilogram of body weight and is preferred by Moore[8]. These drugs should be given in an approximately 30 per cent solution. Chambers and Koetter[14] feel that bismarsen, which is simple to administer and is well tolerated, is the remedy of choice in the treatment of congenital syphilis. They found that the local reaction at the site of injection is greatly decreased if the solution is filtered through gauze and the site of the injection is massaged well. These observers gave two injections a week for 20 injections with a rest period of two weeks between the first two courses and one month between subsequent courses. From three to five courses were given. The dose of bismarsen which they gave varied from 10 to 20 mgm. for an infant two weeks of age up to 75 mgm. from three to twelve months of age. The dose was gradually increased until a child from five to fourteen years of age received 200 mgm. dissolved in 1 cc. of water.

Reilly[15] found that bismarsen was especially valuable in the treatment of infants suffering from very active syphilis and he concludes that it is superior in the treatment of prenatal syphilis. Stokes[16] feels that bismarsen is not the drug of choice for the treatment of late prenatal syphilis. He states that it is ineffective in prenatal neurosyphilis and that interstitial keratitis responds slowly to this drug.

Mapharsen is a potent antisyphilitic remedy and is considered by many observers to compare favorably with the older and more universally used arsphenamines. Since it is usually given intravenously, it can be used in latent or late prenatal syphilis. Morgan[17] recently reported his results following the use of mapharsen in 72 cases of congenital syphilis. He found that the best dose was 0.5 to 0.75 mgm. per kilogram of body weight and he concluded that mapharsen was a more potent agent in effecting a serologic cure than any other arsenical compound previously used in their clinic.

Until the ideal treatment for syphilis is discovered there will continue to be differences of opinion regarding the choice of antisyphilitic remedies. At the present time, most authorities feel that, with the exception of certain types of neurosyphilis, the arsphenamines are the arsenicals to be preferred and, of these, neoarsphenamine and sulpharsphenamine are most commonly used in the treatment of prenatal syphilis.

With the exception of cases of interstitial keratitis, neoarsphenamine is the arsenical of choice for the treatment of syphilis in children who are old enough to permit intravenous injections. Sulpharsphenamine is to be used in the treatment of infants with congenital syphilis.

Bismuth and mercury are the two heavy metals

which are of value in the treatment of syphilis and they occupy a very important place in any plan of modern antisyphilitic therapy. Bismuth salicylate is the heavy metal of choice for the treatment of prenatal syphilis, being given as weekly intramuscular injections in doses of 2 mgm. per kilogram of body weight. Older children tolerate comparatively large doses of bismuth. Wright and Perlman[18] recommend a dose of 100 mgm. for children of five years or over.

The administration of mercury by mouth is ineffective and is apt to cause disturbances of the gastro-intestinal tract. Therefore, in infants, it is best administered in the form of inunctions. One gram of 50 per cent mercury ointment is applied daily to the undersurface of the abdominal binder, 20 to 30 inunctions being given in a course.

Potassium iodide is of value in late prenatal syphilis. The drug should be given by mouth in ascending doses of a saturated aqueous solution. The dosage should be increased to the point well tolerated by the patient. The Cooperative Clinic Group found that the results of treatment of early acute interstitial keratitis were better if iodides were not used. They felt that iodides possibly aggravated the acute inflammatory reaction already present.

Mention should be made of the use of acetarsone or stovarsol in the treatment of prenatal syphilis. I have had no experience with this drug but have been interested in the favorable reports which have appeared in the literature during the past decade. Pediatricians are particularly enthusiastic about its value in the treatment of acute prenatal syphilis. This drug is a pentavalent arsenical containing approximately 27 per cent of arsenic. It is soluble in water, is stable at ordinary temperatures, and in proper dosages is fairly well tolerated when taken by mouth. Observers claim that infants tolerate acetarsone better than children or adults, although it frequently produces symptoms of toxemia. Maxwell and Glaser[19] state that these toxic effects are more frequent but less severe than those accompanying the use of arsphenamine. The more important toxic symptoms are malaise, fever, chills, abdominal pain, jaundice, leukopenia, and dermatitis. Peripheral neuritis was also observed in a few cases and death has been caused by this arsenical.

Abt and Traisman[20], Rosenbaum[21], J. Gay Van Dermark[22] and more recently Smith, Fried and Everhart[23] report rapid disappearance of the lesions of early prenatal syphilis and a high incidence of serologic reversal following the oral administration of acetarsone. Mettel[24] reported favorable clinical results following the use of this arsenical in periostitis of late congenital syphilis. Acetarsone is administered once each day in doses varying from 5 to 20 mg. per kilogram of body weight. It is given in a course of from six to nine weeks and, during the rest periods, mercury inunctions or injections of bismuth are used. The reports in the literature indicate that the most favorable response to acetarsone therapy is best obtained in infants with early congenital syphilis and that the results in older children are inferior to those achieved by the more efficacious and universally accepted arsphenamines.

Comparatively few patients with prenatal syphilis have been treated with acetarsone and most of these have not been observed long enough to determine what the ultimate results will be. Authorities such as Moore[8], Cole[13], and Stokes[16], have expressed the opinion that treatment with acetarsone is still in the experimental stage and should not be used indiscriminately by the practitioner or outside large clinics. Reports on its use in early prenatal syphilis are very encouraging and the studies should be continued and the results carefully checked. Until this has been done, it would seem that, if acetarsone is used in the treatment of early prenatal syphilis, the most advantageous time to use it would be as preliminary treatment of the premature or poorly nourished infant and that it should be discontinued as soon as the physical condition of the infant will permit the use of arsphenamine and bismuth.

SUMMARY

The best treatment of prenatal syphilis is adequate prenatal treatment administered to the expectant syphilitic mother. Numerous studies show that prenatal syphilis can practically always be prevented by treating the syphilitic pregnant woman, provided treatment is begun before the fifth month of gestation and is given continuously and regularly throughout pregnancy. If prenatal treatment fails to prevent infection of the fetus, it serves as the earliest possible therapy for the early stage of prenatal syphilis.

The newborn of a latent syphilitic woman should not be given antisyphilitic treatment until definite clinical and serologic evidence of syphilis develops. The serology of the blood from the umbilical cord is not a reliable indication for the presence of syphilis.

Prenatal syphilis does not differ fundamentally from acquired syphilis of adults; therefore, the broad aims and principles of the management of acquired syphilis should be applied to the treatment of prenatal syphilis. If this is done it is necessary, as in acquired syphilis, to make a distinction between the different stages of prenatal syphilis.

Modern antisyphilitic therapy embodies three fundamental principles; namely the treatment must be continuous and prolonged, it must be regular, and it must consist of alternating courses of an arsphenamine and a heavy metal, preferably bismuth. The arsphenamines are the most effective modern antisyphilitic remedies and are

the arsenical of choice for the treatment of prenatal syphilis.

Intramuscular injections of sulpharsphenamine or neoarsphenamine constitute the best form of arsenical treatment in early prenatal syphilis and should not for the present, at least, be discarded for acetarsone therapy. For older children, the choice of arsenical is the intravenous injection of neoarsphenamine or possibly mapharsen.

A clinical and serologic cure can be obtained in the majority of cases of early prenatal syphilis provided treatment is begun at least before the sixth month of fetal life. Treatment should be continued for one year after the blood and spinal fluid have become and remained normal. A minimum of 25 injections of an arsphenamine and 25 injections of bismuth should be given.

The aim of treatment of latent prenatal syphilis is to prevent the disabling late manifestations of the disease. The incidence of clinical and serologic cure is low. Adequate treatment consists of 50 injections of both the arsenical and heavy metal.

In late prenatal syphilis, the aim of treatment is to achieve symptomatic relief and to prevent further progress of the disease. Treatment of each case must be individualized. Treatment should be continuous and prolonged in interstitial keratitis and in resistant and relapsing cases fever treatment should be used as an adjunct to arsphenamine and bismuth therapy. The treatment of juvenile parenchymatous neurosyphilis is the most difficult therapeutic problem of late prenatal syphilis. At best the prognosis is poor. Malarial therapy followed by prolonged treatment with arsphenamine and bismuth is the treatment of choice. Tryparsamide should be given only in selected cases.

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DISCUSSION

John E. Rauschkolb, M.D., Cleveland, Ohio: This excellent presentation, of one of the most important phases of syphilis, needs no critical discussion but merely emphasizing some of the more important ideas which were so clearly stated by Dr. Netherton. As syphilologists, it is important to emphasize that early diagnosis and thorough continuous uninterrupted therapy is the paramount issue. The correct way to prevent congenital syphilis is the strenuous treatment of the pregnant syphilitic woman continuously throughout each of her pregnancies.

There is no field in the practice of medicine, than in the treatment of congenital syphilis, where closer cooperation and coordination is necessary than between pediatrician and dermatologist and for ocular manifestations between ophthalmologist and the treating physician.

I still favor as a therapeutic drug in syphilis, mercury. Personally, I give mercury salicylate in the form of a 10 per cent oily suspension intramuscularly once a week, in the dosage of a centigram per kilogram body weight. I feel that so given, it removes all doubt of the questionable practice of mercury rub method as to how much the patient actually receives.

Acetarsone is still in more or less the experimental stage. Personally, I believe oral administration, with the possible exception of the iodides, has no place in the treatment of congenital syphilis. My experience with the drug as a therapeutic agent is, that it is very toxic, and that its therapeutic efficiency is very low. Surely the arsphenamines are the arsenic drugs of choice. At this time I can not help mentioning the extreme rareness of cardiovascular syphilis in the congenital syphilitics. In my experience I have never seen this complication.

PERIRECTAL ABSCESSES

By W. W. GREEN, M.D., F.A.C.S., Toledo, Ohio

A LARGE number of physicians regard abscesses of and about the rectum too lightly and treat them with an appalling indifference. A brief analysis of our records showed that slightly more than half of all such cases had previously received palliative treatment for a period of a week or more. Of this number in which surgical intervention was delayed, 85 per cent had consulted and been under the care of a physician. Expectant treatment, while waiting for the abscess to "point" or rupture spontaneously, permits extension of the suppurative process. This is easily avoided by the prompt establishment of surgical drainage as soon as the diagnosis is made. Too often it is only when the pain becomes unendurable or the patient shows signs of toxicity that surgical measures are considered necessary. This is a dangerous attitude that is responsible for many unnecessarily complex fistulae. Three cases in which death occurred are briefly cited to emphasize the seriousness of delayed drainage. Although such fatalities are unusual, they illustrate the danger of delay in cases which at the onset are in no manner different from those with a less serious termination.

The Author

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CASE REPORTS

Case 1—J. E.—Lucas County Hospital—Male—Age 61:—The patient was seen March 20, 1934 in the out-patient department with an abscess involving the right ischiorectal fossa. Symptoms were of a week's duration and his temperature was 98.2. In view of the mildness of the symptoms and the fact that slight drainage was already established through small openings in the overlying skin, the patient was admitted to the hospital to await operation on the scheduled day. At the time of operation, 48 hours later, the abscess had spread to involve both ischiorectal fossae, the perineum, scrotum and penis. Cultures showed the presence of a B-Welchi infection, and in spite of wide drainage and the use of serum, the patient died 40 hours after operation. An autopsy substantiated the clinical and bacteriological diagnosis.

When first examined, this case presented a picture much less acute than is ordinarily seen. In our opinion, the delay in the establishment of adequate drainage allowed the fatal infection to develop and was responsible for death. Similar cases were reported by Campbell and Landsman[1, 7].

Case 2—P. M.—Lucas County Hospital—Female—Age 32: The patient presented herself in the out-patient department on July 29, 1935. She had a right ischiorectal abscess of two weeks' duration with a history of several similar attacks. She refused operation but was admitted to the hospital in a delirious state three days later. We were not notified of her admission until the following day, at which time an emergency operation was performed. The abscess had spread to the opposite side and the patient was very toxic. She did not respond to ample drainage and supportive measures, but died eight hours after operation. Blood cultures were negative and no gas was produced in anaerobic culture. An autopsy was performed and the cause of death attributed to "toxemia due to perirectal abscess".

Here again there was nothing on initial examination to distinguish this patient from others similarly afflicted. Had she submitted to early drainage, death could have been avoided. It is significant to note that when operation was advised, this patient would not consent and stated that she would return to the physician who had "cured" her several times in the past by the use of poultices.

Case 3—W.B.—Lucas County Hospital—Male—Age 30: The patient was admitted to the hospital on February 1, 1937. He gave a history of a left perirectal abscess which had been present for three weeks. For two weeks prior to admission, a slight drainage had been present as the result of spontaneous rupture. There was an associated active pulmonary tuberculosis and the Wassermann reaction was positive. We were not notified of the patient's admission until 26 hours later, at which time he was very toxic and had a temperature of 104.0. At operation, there was marked destruction of the levator muscle on the affected side. Death occurred in ten hours and no autopsy permit could be obtained. Although the culture showed organisms morphologically similar to B-Welchi, no gas was produced under anaerobic conditions.

In this case, the delay in operation may have resulted in the primary cause of death. However, death would have occurred in any event in view of the severe nature of the pulmonary infection.

GENERAL CONSIDERATIONS

Although the abscesses themselves do not differ from those elsewhere, the structure and anatomy of the perirectal region create problems peculiar to infections of this area. The abscess usually originates in one of two ways; it may arise from organisms that have found their way through a break in the rectal mucosa, or it may be initiated by direct extension from an infectious process of near-by structures.

In general, the same symptoms are common

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to all of the abscesses. There is a variation in the predominating and absent ones, as well as in the severity and in the rapidity of the onset. Pain is almost constant, ranging from a vague discomfort to a type that is throbbing and quite severe. Referred pain depends upon the location of the infection, and may extend to the back, down the thighs, or involve the urinary system. In the later stages, sphincter spasm is common to all but the more chronic abscesses. Sudden alleviation of symptoms is a sign of extension or rupture. The latter may occur externally to form a complete fistula, internally into the rectum to form a blind internal fistula, or into the adjacent organs to form a fistulous tract that usually resists all attempts at closure.

ANESTHESIA

In choosing an anesthetic, remember that the patient is in pain and extremely nervous. A knife-jab under a spray of ethylchloride provides inadequate drainage and usually marks the last visit of the patient to the office. Unless definitely contraindicated, we feel that gas-oxygen with its quick induction and lack of after effects is the anesthetic of choice. The intravenous use of evipal or pentothal is quite satisfactory when the extent of the abscess can be estimated before operation[5, 6]. For temporary relief a small incision under procaine may suffice; this may also be employed when the condition is chronic and the walls thick and well defined.

OPERATIVE PROCEDURE

The principles of early incision and adequate drainage apply to all of these abscesses. Their location determines the avenue of approach. In providing drainage, leave the surface smooth with no shelves or pockets to harbor infection. If necessary, sacrifice healthy tissue externally so that the skin opening is the largest part of the cavity. If the patient is in the lithotomy position, keep in mind the relation of the parts when he is upright.

POST-OPERATIVE CARE

One has not discharged his duty to the patient by merely evacuating the pus. The type of post-operative care often determines whether or not a fistula will persist. After the packing inserted at operation has been removed at the end of 24 hours, no more should be used unless to control bleeding. The daily use of packing is painful and acts as a plug rather than a drain. The patient should be out of bed as early as possible, since motion and the upright position favor drainage. Early and frequent digital exploration breaks down adhesions and pockets and promotes healing from the base. When the discharge is profuse, the cavity should be irrigated during digital examination. Hot Sitz baths three or four times a day provide comfort for the patient and keep the cavity clean. A well-performed operation is of little avail if the after-care is indifferently carried out.

CLASSIFICATION

In view of the surgical approach, a classification based upon the anatomy of the rectal and perirectal area is the most practical[2, 10].

A—Infralevator
- 1) cutaneous
- 2) marginal
- 3) ischiorectal

B—Supralevator
- 1) superior pelvirectal
- 2) retrorectal
- 3) submucous or mural

CUTANEOUS ABSCESS

Cutaneous abscesses of this area do not differ from a folliculitis elsewhere, and need no special consideration.

MARGINAL ABSCESS

Marginal abscesses occur beneath the skin and mucous membrane at the anal verge. They do not spread rapidly, as they are limited by the grasp of the sphincter. Fissures, abrasions, thrombotic and infected internal and external hemorrhoids are the most common causes. Unhealed areas, particularly following the suturing of the mucosa after a hemorrhoidectomy, may initiate the infection by impeding drainage.

The throbbing pain is usually in proportion to the extent of the area caught within the grasp of the sphincter. Sitting, coughing and defecation aggravate the symptoms. The swelling is never very apparent except in the posterior type where it resembles a swollen skin tag.

The abscess is best felt by bi-digital palpation, i.e., a forefinger in the canal and the thumb pressing on the para-anal region. A well localized, indurated, tender area is found; it is particularly noticeable if compared to the unaffected side.

A short longitudinal incision should be made in the perianal skin where bulging is most prominent. Another incision, at right angles to the first, should be made running into the canal to the site of the internal opening. This forms a T-shaped incision, and the edges may be trimmed to facilitate drainage. If of the posterior type, or if the walls are thick and the cavity small, the involved area may be excised. The wound must be kept open and smoothed out by digital exploration every second or third day. An abscess of this type is well localized and does not involve the sphincter muscle. This factor, added to the ease of obliterating the internal opening, minimizes the possibility of subsequent fistula formation.

ISCHIORECTAL ABSCESSES

Abscesses involving the ischiorectal fossae are the most common of those affecting the perirectal region. In a large percentage of cases the origin

is in the crypts of Morgagni, usually in the posterior commissure. After breaking through the canal wall, the infection spreads rapidly through the poorly nourished and loosely constructed tissue of the ischiorectal fossa. The fossa is trabeculated, which predisposes to pocket formation. Anatomically, the weak spots where the levators join posteriorly and across the perineum anteriorly favor the extension of the infective process from one side to the other. Since the spread is along the path of least resistance, it is often not until one or both fossae are involved that the abscess manifests itself externally.

There is a constant throbbing pain locally, with the sensation of fullness and often tenesmus. Sphincteralgia and urinary symptoms occur in the later stages; early the signs are vague. The exploring finger may feel a bulging of the rectal wall on the affected side and palpation here may elicit tenderness. When the entire fossa has been involved, external signs are present. The buttox on the involved side bulges and palpation causes pain. The overlying skin is brawny and often mottled in appearance. The area is indurated, and fluctuation is frequently elicited near the anus.

It is not infrequent that, after a few days of increasing severity, the local symptoms subside. This signifies that the infective process has ruptured either into the rectum, through the skin, or across the midline to involve the opposite side. It is unwise to await spontaneous rupture, as this

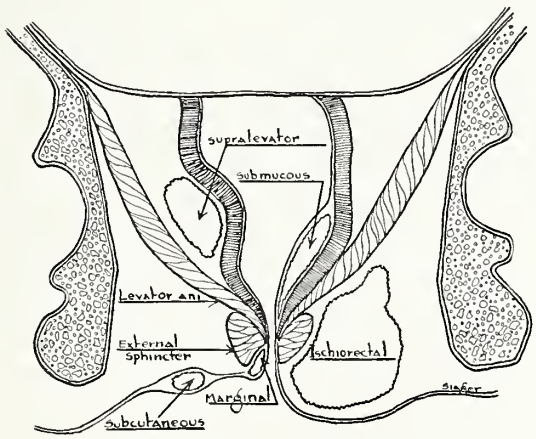


Fig. 1. The relationship of perirectal abscesses to the pelvic structures.

often occurs only after complete destruction of one or both fossae.

Incision and drainage with adequate after-care lessens the frequency of fistula formation. A free incision extending the entire length of the cavity should be made parallel to the anus and far enough away to avoid the external sphincter. Gentle exploration with the finger is used to break the trabeculae and prevent pocketing. If care is not taken in doing this, the infection may easily be spread into healthy tissue. The edges of the skin should be cut away so that the cavity is scalped, i.e., the cutaneous covering is removed. Bleeding is controlled by hot packs and ligatures where necessary. When both fossae are involved, the parallel incisions are not brought together, although the connecting channel is enlarged to provide free drainage. Post-operatively, one side usually heals completely leaving the fistula on the other.

Quite often the rectal opening through which

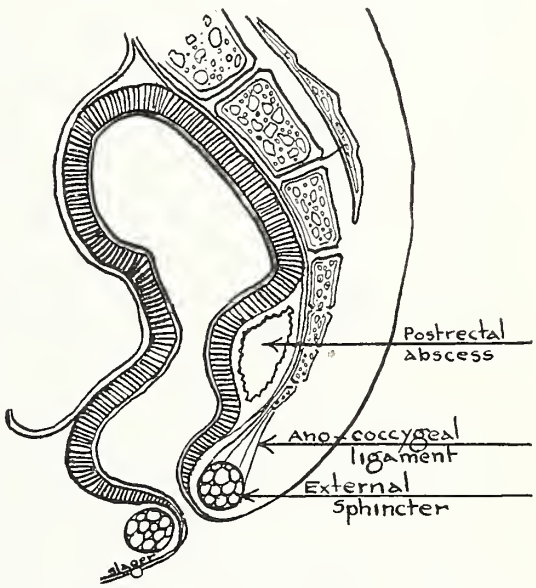


Fig. 2. Saggital section showing the relation of a postrectal abscess to the external sphincter and its ano-coccygeal attachment.

the infection originated is found. It is usually unwise to do more than drain the abscess. This avoids adding unnecessary mutilation to the destruction already caused by the infective process. Fistulectomy may be done more safely and thoroughly at a later date.

SUPRA-LEVATOR ABSCESSES

Two types of abscesses occurring in the supralevator group are the superior pelvirectal and the retrorectal. Since their origin, course and treatment are somewhat similar, they can be discussed together. Due to concealed symptoms and ready extension, these are the more serious types of abscess and their early diagnosis is important. In addition to the usual conditions causing abscesses about the rectum, infection here often occurs from extension from bone disease or from adjacent viscera. A not infrequent type of invasive organism is one of the streptococcic group, and gangrene and slough are commonly found.

The early symptoms are indefinite and obscure. The retrorectal abscess remains well localized, and does not cause the general symptoms that the other type does. Onset is gradual and symptoms are slow in developing; there is

the usual feeling of weight and pressure in the lower pelvis. Low backache and tenesmus are common to both. A retrorectal abscess is usually felt as a boggy mass bulging into the rectal ampulla posteriorly. The superior pelvirectal is not as easily felt; it is higher and usually bulges more anteriorly than laterally.

The approach to the superior pelvirectal abscess is through the ischiorectal fossa, never through the rectum. Blunt dissection is used because of the proximity of the peritoneum. After the cavity is located, the levator fibres are cut at right angles for a short distance to allow good drainage. A large tube is inserted through this opening to keep it patent until the cavity is filled with granulations. As sometimes happens, portions of the levator slough away in which case the cavity is treated as in the ischiorectal type. This same approach is applicable to the retrorectal abscess as well. It has the advantage over the crescenteric incision across the midline posteriorly, in that it gives just as good drainage yet preserves the attachment of the external sphincter to the coccyx.

SUBMUCOUS ABSCESSES

Submucous abscesses are usually found in the canal and the lower three inches of the rectal ampulla. The condition arises from cryptitis, ulcers, perforation by foreign bodies and from unhealed wounds. The symptoms vary in severity and are usually less pronounced than in the other types. Submucous abscesses are quite apt to be chronic, in which case the walls are thick and may resemble a tumor. The abscess is felt as a well outlined, boggy, elastic mass easily reached by the examining finger. Care must be taken not to confuse it with a thrombotic internal hemorrhoid or even an early, well localized malignancy.

This is the one type of abscess that is drained through the rectum. The overlying mucous membrane is divided its full length, and if feasible, the edges are trimmed to provide better drainage. Bleeding is often troublesome, but is usually controlled by dry packing which is left in place 48 hours. The tract must be smoothed with the finger every few days until healed in order to prevent premature closing of the mucous covering.

TUBERCULOUS ABSCESSES

Tuberculosis may be the cause of any of the perirectal abscesses, although it most frequently manifests itself in the marginal type. With the more accurate methods of determining the presence of the Koch bacillae, it has been possible to disprove the earlier teaching that many of these abscesses are of tuberculous origin. They comprise only about 5 per cent of the total, and are found only in those patients who have an active or recently healed lesion elsewhere[3, 4, 8, 9].

The symptoms of the tuberculous abscesses are not as fulminating as those of other origin and there is comparatively little discomfort. If near the skin, the overlying tissue is thin and blue. The discharge is thin and pale yellow instead of heavily purulent as in other abscesses; secondary invaders are always present. A tuberculous abscess is usually characterized by the absence of fibrosis and induration.

Even in patients with a very active pulmonary tuberculosis, drainage should be instituted as early as diagnosed. Healing is very slow and fistulae usually develop. However, early drainage relieves the patient of just one more obstacle to his fight for health.

PILONIDAL ABSCESSES

An infected pilonidal cyst is mentioned here because it is frequently confused with abscesses of rectal origin. The symptoms are those of any other acute abscess, and the infected area is over the lower sacrum and coccyx. Occasionally the abscess extends to the rectum. After drainage, a secondary operation to remove the sac is necessary.

SUMMARY

A better understanding of the various pelvirectal abscesses will lead to a smaller incidence of sequellae as well as to quicker and more comfortable convalescence. Expectant treatment is dangerous; the physician who will promptly open an abscess elsewhere too often awaits spontaneous rupture when the perirectal area is involved. All abscesses of this region are not alike; their differences must be recognized and the type of drainage adapted to each one. Surgical drainage should be instituted as soon as the diagnosis is made; if pus has not yet formed, wide incision checks the spread of the infection. Careful and conscientious post-operative treatment is as important as the operation itself. Never fail, upon opening an abscess, to inform the patient that a fistula may develop; it is easier to assume credit for an uncomplicated result than to later explain why a secondary operation is nececssary.

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REPORT OF FIFTY CASES OF GONORRHEAL INFECTION IN CHILDREN TREATED WITH SULFANILAMIDE

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FOR the past 10 months we have made a careful study of the value of sulfanilamide therapy in the treatment of gonorrhea in children. Dees and Colston[1] reported encouraging results following the treatment of adult patients having gonorrhea, and we attempted to determine its value for children. Two simultaneous reports in the literature of similar series studied during the same period as ours have recently appeared.[2, 3]

Our patients were all ambulatory and were seen once weekly. It was frequently difficult to have them return for checkups. Columbus school authorities cooperated very well requiring all children to stay home during active treatment, and persuading them to return for monthly checkup examinations. The District Nurses and the Hospital Social Service staff made frequent visits to the home in order to determine, if possible, the source of infection; to supervise medication; to observe any untoward effects of the drug; to encourage return visits to the clinics; and, to prevent spread of the disease within the family.

Two positive smears were obtained before treatment was started. A blood count and urinalysis were done in 24 cases before and after the use of sulfanilamide. Blood counts were done on all patients. All were weighed at each visit. The temperature and general physical condition were checked frequently. Smears were examined weekly until four consecutive negatives were obtained, following which monthly checks were made.

A standard dosage was used at the onset of all cases:

1. First to third day:
   1 gr. per pound per day
2. Fourth to seventh day:
   ½ gr. per pound per day

(A) If the smear was positive at the end of the first week:

3. Eighth to tenth day:
   1 gr. per pound per day
4. Eleventh to fourteenth day:
   ½ gr. per pound per day

(B) If the smear was negative at the end of the first week:

5. Eighth to fourteenth day:
   ½ gr. per pound per day
6. Fourteenth to twenty-eighth day:
   ½ gr. per pound per day
7. If medication was carried longer the dosage was reduced to gr. 1/3 or 1/4 per pound per day.

In all cases the drug was given in divided doses during the day. Bicarbonate of soda was given each time with the sulfanilamide to prevent acidosis.

Results were evaluated as good, questionable, or poor. A case was considered cured with good results if: (1) no discharge was noted; (2) four consecutive negative smears were obtained, the first of which was within one month after the onset of treatment, and (3) two monthly check-up smears were negative. The results were considered questionable if: (1) following an apparent cure the patient had a recurrence; (2) the discharge stopped but smears contained gram-negative intracellular diplococci; (3) cured with the first negative smear not within the first month of treatment, and (4) if the medication was stopped after the patient had some relief because of fear of reaction. Cases were considered failures if sulfanilamide had no effect on the discharge or smears. Illustration follows:

Age Groups	Total Cases	Good	Questionable	Failure
1 to 5 years	14	9	3	2
6 to 10	29	14	6	9
11 to 15	7	5	0	2
Sex				
Male	10	9	1	0
Female	40	19	8	13
Type				
Acute	27	17	5	5
Chronic	23	11	4	8
Total	50	28	9	13

Sulfanilamide seemed to have no deleterious effect on the appetite of these children or their ability to gain weight. All who lost weight had

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• Dr. Reck is a graduate of University of Michigan Medical School, 1935; member University of Michigan Pediatric Society; former resident physician at Children's Hospital, Columbus.

Submitted July 25, 1938.

Studies made in the Department of Urology, Children's Hospital, Columbus, Ohio.

other contributing conditions than the gonorrhea. Three had otitis media; one had measles; another had a skull injury.

	Cases	Average gain per patient
Gained	40	4.5
Lost	5	3.0
Same	1	
Undetermined	4	

Blood counts were made in all cases. However, in only 24 did we obtain one at the beginning and end of sulfanilamide treatment, average length of which was seven weeks. Many of these cases were not considered to have good results from their sulfanilamide therapy as far as their Neisserian infection was concerned, but do show us that prolonged use of the drug will not cause any severe damage to the blood picture.

	Hb.	Average	R.B.C.	Average	W.B.C.	Average
Increased	13	11%	6	900,000	8	2,300
Reduced	9	9%	2	700,000	16	4,000
Same	2		16		0	

We feel that in part this is due to the fact that a large dosage was given for only three days. When medication was continued over a period of weeks, daily dosage was gradually reduced.

In the 28 cases which had good results from sulfanilamide, the smears were negative within four weeks, the average being two weeks. They had monthly checks after their four consecutive negative smears. They were followed from two to ten months, the average being ten months.

COMMENT

Long and Bliss[4] reported that in vitro a 1:10,000 concentration of para-amino-benzene-sulfonamide would inhibit the growth of several varieties of Neisseriae from the throat. Carey[5] reported one good result and one failure in the treatment of vulvovaginitis with sulfanilamide. In May, 1938, there were two reports similar to ours in the literature. Holmes, Jones, and Gildersleeve report 51 cases [2]. Sixteen had temporary relief and eight had recurrences. Their dose was grains ½ per pound per day. Hoffman, Schneider, Blatt and Herrold report 25 cases[3]. Their results were better and their initial dosage was gr. ¾ per pound per day, which was reduced after the first two days of treatment.

We feel that sulfanilamide is justified in the treatment of gonorrhea in children. It is easier to administer, having less physical as well as psychic trauma, than irrigations. It seems that the drug is reasonably safe to use in ambulatory cases if the large dosage is not maintained over three days. While repeated blood counts failed to show any serious ill effects of the drug in this series, we are continuing to check our patients very frequently. If sulfanilamide has caused no relief within the first month we now are using estrogenic or antiseptic therapy. In some of our resistant cases we have had favorable effects from the combined use of sulfanilamide and estrogenic therapy, results of which will be published at a later date.

SUMMARY

1. Fifty cases of gonorrhea in children are presented.

2. Effects of sulfanilamide on these cases were studied.

3. It is felt that sulfanilamide can be used for treatment of gonorrhea in ambulatory patients.

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Low Back Pain

Hypertrophy of the ligamentum flavum is a definite clinical entity producing pressure upon the fibers of the cauda equina, and when there is a history of trauma followed in the course of a few weeks to one or two years by low back pain with radiation in the distribution of one or both sciatic nerves, loss of sensation or strength, and absence of the Achilles reflex, this condition must be borne in mind.

Injection of lipiodol will definitely demonstrate a filling defect in the spinal canal and removal by laminectomy is the only procedure which will afford relief from these distressing symptoms. It must be emphasized, however, that all cases of low back pain are not the result of this condition and it is obvious that the more conservative measures should be attempted first. However, in the event of failure of improvement with the above stated history of injury, this condition should be definitely eliminated.—Walter D. Abbott, M.D., Des Moines, Iowa. Jour. Iowa State Medical Society, Vol. XXVI, No. 7, July, 1938.

CARBON MONOXIDE POISONING

By HOWARD A. MARTIN, M.D., Toledo, Ohio

CARBON monoxide poisoning ranks second only to automobile accidents in the list of lethal agencies, and first among industrial hazards. Martland estimates that of the 1,000 asphyxial deaths occurring weekly in this country, about 50 per cent are due to carbon monoxide inhalation—accidental, suicidal, or homicidal. The three most common sources are illuminating gas, exhaust gases from internal combustion motors, and coal gas from improperly burning coal fires or defective furnaces and stoves.

Pure carbon monoxide in the atmosphere is not readily detectable because it is practically odorless, tasteless, and colorless. However, it is usually mixed with other gases which are readily recognized, either by sight or smell, or both, and this fortunately favors its detection even in comparatively small concentrations.

Workers should be protected from concentration in excess of one part to 10,000 of air. A detector has been developed by the Bureau of Mines which will indicate the presence of carbon monoxide in the air in a concentration of .07 or more. This instrument, perfected by Teague, employes hoolamite, the activated iodine pentoxide indicator. It has proved of great value in mine rescue work and in testing plants where this hazard prevails.

A simple instrument has been devised by Sayers and Yant, known as the pyrotannic detector, to determine the amount of carbon monoxide present in the blood. The instrument is valuable to use when there is any doubt whether carbon monoxide is the cause of unconsciousness.

Carbon monoxide has a twofold action on the organism: it asphyxiates and it produces changes in the central nervous system. Symptoms depend upon the concentration of the gas in the air, which in turn determines the concentration in the blood. Even dilute concentration of carbon monoxide in the air will eventually result in death, due to accumulation in the blood, if the time of exposure be sufficiently prolonged.

Dilutions as low as 0.05 per cent produce symptoms, and 0.25 per cent will produce death in a short time. Occasionally only a very short period of exposure, one or two minutes, may suffice to produce severe symptoms, and instances have been recorded in which unconsciousness occurred simultaneously with the first breath of the gas. The saturation, in percentages, of the blood which results in symptoms can be summarized as follows: 20 per cent—no effects; 30 to 50 per cent—muscular weakness, incoordination; 50 to 70 per cent—paralysis, unconsciousness and death; 80 per cent—rapid fatality.

Submitted September 7, 1938.

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Carbon monoxide has no particular effect on the upper respiratory tract, not even that of irritation. The asphyxiating action results from the union of carbon monoxide with the hemoglobin, forming carbon monoxide—hemoglobin, a very stable compound in which there has been replacement of oxygen, volume for volume. The erythrocyte itself is unchanged and still may be capable of functioning normally, even again carrying oxygen, provided the CO is later displaced by exposure to oxygen in sufficient concentration. Carbon monoxide-hemoglobin is more readily formed with oxyhemoglobin than with plain hemoglobin.

The chemical reaction means that, at a given tension of CO, the blood pigment will more quickly be changed to carbon monoxide-hemoglobin if oxygen is present. The chemical reaction between oxyhemoglobin and carbon monoxide is reversible: $HbO_2 + CO \rightleftarrows HbCO + O_2$. Very small concentrations of the poison in the atmosphere can convert a substantial portion of the hemoglobin into carbon monoxide-hemoglobin, leaving insufficient pigment to combine with oxygen. This is due to the remarkable affinity of hemoglobin for CO. The reaction, $Hb + CO \rightleftarrows Hb\,CO$, also reversible, but due to the fact that a CO pressure of 0.4 to 0.5 mm. of mercury is equivalent to an oxygen pressure of 100 mm. of mercury, in terms of affinity for hemoglobin, CO expulsion is slow except in high concentrations of oxygen. The slow expulsion may result in anoxemia outlasting the acute poisoning. Carbon monoxide-hemoglobin causes true asphyxia, and imparts a distinctive cherry-red color to the blood which is easily recognized and facilitates the diagnosis of CO poisoning.

The action of carbon monoxide upon the nervous system is not so well understood. Whether the damage is a direct specific destruction of nervous tissue itself, peculiar to the gas as some workers believe, or a change due to anoxemia, is not definitely settled. Softening of the lenticular nucleus is often found, and some consider this change to be a typical effect of carbon monoxide. The view that is favored is that the various anatomical and physiological nervous aberrations which follow carbon monoxide poisoning are the result of anoxemia only. The brain may show

hyperemia, edema, degeneration, and hemorrhage. Specific areas are often found to be particularly affected, the dorsal motor nucleus of the vagus, for example, and the lenticular nucleus as already mentioned. Whatever the modus operandi, the fact remains that in cases of CO poisoning nervous symptoms occur and sequelae may remain after recovery from the acute intoxication. Shillito, Drinker, and Shaughnessy investigated 43 cases of carbon monoxide poisoning with residual nervous and mental symptoms. They ranged from an increase in reflexes to definite Parkinsonism, from slight degree of anesthesia in localized areas to peripheral sensory and motor neuritides, and, on the mental side, from slight confusion and disorientation to psychosis. Of the 43 cases, 23 recovered completely, 9 suffered permanent nervous or mental sequelae, and 11 died.

Carbon monoxide poisoning may be acute or chronic, and symptoms will vary, depending on the amount of gas absorbed and the length of exposure. Acute poisoning may manifest itself in several ways. Death may come very suddenly, as has been shown in certain instances where the attitude of the victim made it appear unlikely that any warning of danger had been given. Usually, however, the symptoms, although progressing rapidly from one stage to the next, present definite grades of increasing intoxication. Headache is most commonly the first evidence, followed by throbbing of the temples, buzzing in the ears, faintness, vertigo, and unconsciousness. The skin may show bright pink patches. The heart becomes gradually slower and weaker in action, and paralysis ensues. There may be involuntary discharges of excrement or semen. The patient, when found, is usually unconscious or moribund, and the reason for the coma may be doubtful unless the origin of the gas is plainly evident.

Chronic poisoning develops insiduously, due to repeated exposure to sublethal concentrations of the gas over long periods of time, eventually causing sufficient alteration in the hemoglobin to result in symptoms. For example, traffic officers exposed to varying concentrations of gas may eventually develop persistent headache, irritability, and general malaise. In addition, there may be digestive disturbances, coated tongue, grayness of the skin, and loss of memory. Some investigators have found that workers exposed to carbon monoxide over long periods of time develop erythremia. One case has been reported with a red cell count of nine million, probably a protective response to the increasing amount of carbon monoxide-hemoglobin.

Williams and Smith in their study of chronic CO poisoning in the rat, found increases in the hemoglobin, the number of red blood cells, the cell-plasma ratio (from the normal of 58.8 to 75), and red blood cell fragility. Sterility ensued, and the body weight decreased.

Beck studied 114 consecutive cases of chronic CO poisoning and observed six clinical syndromes resulting from the intoxication. The first of these, the anoxemic syndrome, is characterized by the usual signs of oxygen-lack—headache, vertigo, dullness, yawning, dyspnea, weakness, etc. It was present in all cases and constitutes a part of the other syndromes. The second syndrome is characterized by polycythemia. A rare hematologic aftermath is anemia. Instances of both disturbances are cited. The cerebrospinal syndrome may manifest itself in several ways: Stupor is common, as is also tetany; disorientation, drowsiness, nervousness, muscular weakness, ataxic gait, and vertigo are often seen. The cardiovascular syndrome has symptoms referable to myocardial anoxemia. Despite the fact that carbon monoxide is not, of itself, irritating to the respiratory tract, hoarseness, cough, and respiratory distress may occur and constitute the symptoms of the respiratory syndrome. Finally, there is the gastrointestinal syndrome, characterized by enterospasm, subacidity and achylia, and nausea and vomiting. Beck emphasizes the necessity for searching for sources of CO intoxication when patients with these symptoms are seen. He states: "Many of the milder cases are erroneously diagnosed neurasthenia or psychasthenia, owing to the absence of any very definite clinical findings. However, the blood morphology, bradycardia, hypotension, hypometabolism, gastric subacidity with tendency to glycosuria are contributory factors in making the diagnosis."

The immediate treatment of acute poisoning consists of removing the victim from the CO-containing atmosphere, applying resuscitative measures, preventing exertion or undue exposure, and keeping the patient warm. In less severe cases, such measures alone are often sufficient. Henderson advises strongly against cessation of resuscitative measures for the administration of stimulants or completion of examination. Stimulants may have a salutary respiratory effect, but a subsequent detrimental effect on cardiac function may be strongly inimical to the patient's eventual recovery. Under treatment the carbon monoxide-hemoglobin disappears from the blood within a few hours; if coma and other toxic manifestations persist, damage to the nervous system must have occurred.

Inhalation therapy, either pure oxygen or a mixture of 5 per cent carbon dioxide and 95 per cent oxygen, should be continued until the pulse and temperature are normal.

Blood transfusions are of no avail. Some years ago the intravenous injection of a 1 per cent solution of methylene blue was suggested for the treatment of carbon monoxide poisoning, because methylene blue is of definite benefit in cyanide poisoning, and asphyxia is common to both types

of poisoning. The cyanides interfere with the oxidative ferments in the tissues, and methylene blue helps restore the ferments to activity. A similar physiological effect was credited to carbon monoxide, and methylene blue was, as a consequence, advocated in the treatment of CO poisoning. Many articles were published concerning the value of methylene blue. Bell reported a case of carbon monoxide poisoning apparently benefited by methylene blue. Christopherson, ibid., p. 2008, stated: "It would appear that the methylene blue had a remarkably specific action in these cases of carbon monoxide poisoning." Nass, ibid., p. 1862, reported a case of poisoning with CO which recovered after methylene blue was administered. However, artificial respiration was administered both before and after the dye was given, and fluids and caffeine sodium-benzoate administered as well, so that no definite conclusion could be drawn.

Geiger and Gray reported that while methylene blue was dramatically beneficial in six cases of cyanide poisoning, in nine cases of carbon monoxide poisoning it was merely "without apparent untoward or deleterious effects". The statement was in answer to the growing opinion that methylene blue was harmful in CO poisoning. Although Brooks, as late as 1934, showed, by means of in vitro experiments, that methylene blue turned carbon monoxide-hemoglobin into oxyhemoglobin, and stated that the dye was a rapidly acting antagonist to carbon monoxide poisoning the preponderance of evidence is against the use of methylene blue. Three years before Bussabarger showed, by means of in vivo experiments, that methylene blue is useless in these cases and may even also be harmful. These conclusions have been confirmed by Mack and Smith, Martland, Haggard and Greenberg, who called methylene blue a synergist of carbon monoxide rather than an antagonist. Crisler points out that methylene blue forms methemoglobin. In cyanide poisoning, where anoxemia is not a factor, this aids in drawing the cyanides out of circulation, but in carbon monoxide poisoning, where the oxygen carrying capacity of blood is already dangerously affected, the formation of still more non-oxygen-bearing pigment (methemoglobin) is definitely contraindicated. The preponderance of opinion now is that the use of methylene blue not only has no scientific foundation but may aggravate the patient's already precarious condition.

The postmortem condition is of interest, particularly in view of the necessity which often arises in medicolegal cases of establishing the cause of death. McNally describes these changes as follows:

"Poisoning by a small amount of carbon monoxide may produce very few changes, or if the patient lives for a number of hours after exposure, only a careful examination of the blood will reveal the presence of the gas. Where the blood is well saturated with the gas, the surface of the body is cherry-red. The eyes are closed and the countenance usually composed. The dependent parts of the surface of the body are of deeper red than other parts. There are frequently bright red patches upon the thighs and the front of the trunk and neck. The most characteristic change is the bright cherry-red blood, usually fluid and coagulating slowly, present in the arteries, veins, and all of the tissues. .. . The brightness of carbon monoxide hemoglobin may be masked by carbon dioxide from the fumes of coal gas or from the smoke of burning wood or other combustible material. . . . If the gas poisoning be prolonged, small hemorrhages are present in the pleural cavities, with pulmonary edema and bright red froth in the air passages. The gastric and intestinal mucosa may also have small punctiform hemorrhages. . . . Where life has been prolonged, the skin may show herpes, blebs, and pemphigus followed by gangrene." McNally also points out that the distinctive cherry-red color of the blood may persist for long periods of time.

Henderson, reporting for the Committee on Poisonous Gases of the American Medical Association, recommends the following:

Since educational activities as to the dangers of CO in daily life are not enough to prevent many accidents, regulations strictly enforced to remedy defective flues, leaking ranges, and stoves are necessary; also essential is efficient governmental inspection and supervision of gas appliances used in the home. The amount of CO in city gas should be reduced, scientific investigation in the field of less poisonous gases should be supported financially, and gas charges should be figured on the basis of heat unit rather than volume consumed. The dangers of automobile exhausts in closed buildings should be stressed continuously, and especially before the winter season. Mechanical resuscitation devices, such as the pulmotor, should be discarded, and reliance placed on prone pressure and inhalation of oxygen or of oxygen and carbon dioxide.

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CASE RECORD PRESENTING CLINICAL PROBLEMS

A Boil on the Cheek and Its Sequela

By HARRY L. REINHART, M.D.

A WHITE male, 30 years old, entered the hospital complaining of a swollen, painful right eye. He was well until eight days before admission when he noticed a boil developing at the site of a shaving cut on his right cheek. During the next four days this boil increased in size until it was approximately an inch and a half in diameter; it was then incised and drained of a small amount of pus. On the following day the right eye was markedly swollen. Hot applications to the eye were used with little relief, and the swelling and tenderness increased. During the two days prior to admission he had a slight temperature, chills and sweats.

Physical examination: T. 102.6°. P. 104. R. 22. The patient is a well developed and well nourished 30 year old white man. The skin is dry and hot. The right eye is swollen shut by a red, tender, hot cellulitis. There is a large furuncle on the right side of the face just anterior to the right external auditory meatus. The breath is fetid and the pharynx is injected. The anterior and posterior cervical lymph nodes are palpable.

Laboratory Work: Blood Count—Hb. 14.7 grams (103 per cent); R.B.C. 4,760,000; W.B.C. 9,250; segmented neutrophils 76 per cent, bands 11 per cent; lymphocytes 13 per cent. Urine—specific gravity 1.026; reaction alkaline; 40 mgm. per cent albumin; no sugar or acetone. Microscopic examination:—R.B.C. 3-4 HPF; W.B.C. 5-7 HPF; occasional finely granular cast. Culture of pus from furuncle—hemolytic staphylococcus aureus. Spinal Fluid—third hospital day—color, diffusely pink and cloudy; pressure 270 mm. H_2O; Queckenstedt, negative; cells, R.B.C. 1125 cu/mm, W.B.C. 7800 cu/mm; polys 92 per cent; lymphocytes 8 per cent; smear—gram positive cocci; culture—hemolytic and non-hemolytic staphylococcus aureus. Blood culture on third hospital day—positive for hemolytic staphylococcus aureus.

Hospital Course: On the day of admission the temperature rose to 104°. The following day his temperature was 100° but there was an extension of the cellulitis to the left eye. He complained of suboccipital headache and nausea, presented a slight rigidity of the neck and was stuporous. On the third day the stupor became more marked, his temperature increased to 106°, and he expired.

Dr. Robert E. S. Young:

The patient was a 30 year old male who cut his face while shaving. The cut subsequently became infected with the development of a large furuncle. The lesion rapidly enlarged and was incised on the fourth day. This is typical of the lay treatment of furuncles of the face. The face and more particularly the area that drains into the anterior facial vein is an extremely dangerous area, for this area drains through the ophthalmic veins into the cavernous sinus. Thrombophlebitis of the cavernous sinus leads to purulent meningitis, brain abscess, bacteriemia and death in the great majority of the recognized cases. The treatment of furuncles of the face should always be conservative, never surgical.

On the following day, the patient developed a swelling of the right eye. This is presumptive evidence of a spread of the cellulitis or of thrombophlebitis of the cavernous sinus. Within 24 hours the patient had chills, fever and sweats: this clinically marks the onset of bacteriemia.

On admission the patient was manifestly quite ill. The right eye was swollen shut and could not be examined. This swelling was further complicated by a red, hot and rapidly spreading cellulitis which involved the face and eye-lids. The cellulitis somewhat obscured the classical signs of uncomplicated cavernous sinus thrombosis, namely: dilatation of the frontal veins, cyanosis of the eye-lids, local chemosis and exophthalmos. As the eye was swollen shut, the usual signs of early cavernous sinus thrombosis could not be observed, namely: papillo-edema and stasis of the retinal veins on the affected side, paralysis of the eye muscles, amblyopia, and pain along the ophthalmic division of the fifth cranial nerve. Although many of the fine points of diagnosis could not be observed, the course is definitely that of a cavernous sinus thrombosis.

On the second hospital day, the left eye became swollen, and the cellulitis was seen to have extended across the bridge of the nose. This swelling may have been due entirely to the cellulitis or it may have been produced by extension of the thrombus through the circular sinus and hence into the opposite cavernous sinus. The patient became stuporous, complained of headache and nausea, the temperature rapidly rose. Slight rigidity of the neck was noticed; in short the disease process had broken the bounds of a limited thrombosis and meningitis was present. This is confirmed by spinal puncture. The finding of an increased intracranial pressure, marked elevation of a leucocyte count, principally polymorphonuclear leucocytes, and gram positive cocci definitely confirm the diagnosis of purulent meningitis. Thrombophlebitis alone never produces more than an aseptic meningitis.

The white blood count was only 9,250 on admission and an hemolytic staphylococcus aureus was cultured from the pus of the furuncle. The same organism was cultured from the blood on the third hospital day. This case then, has a background of an extremely virulent organism

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This is the thirty-fourth of a series of cases to be published under the heading, "Case Record Presenting Clinical Problems." The cases presented are selected by Dr. Harry L. Reinhart as the most instructive among those discussed at the weekly pathologic conferences at Starling Loving Hospital, Ohio State University, Columbus, Ohio.

infecting a host of poor resistance, if such loose terms may be used. An overwhelming infection might early have been predicted.

The remainder of the laboratory findings are of little diagnostic value. The hemoglobin value of 103 per cent and the urine specific gravity of 1.026 shows evidence of a mild state of dehydration. The presence of albumin and a few red and white blood cells in the urine is presumptive evidence of a septicemia.

The Queckenstedt test is important only in that it shows there was no thrombosis of the lateral sinus. In thrombosis of the lateral sinus, pressure on the side of the lesion fails to elevate the spinal fluid pressure, whereas pressure on the unaffected side causes an excessive elevation equivalent to that normally seen when both veins are compressed. Often when the diagnosis is in doubt and one would wish to do the Queckenstedt test, it is unwise to do so, for if the patient is suffering from a bacteriemia and a lumbar puncture is done, the bleeding at the site of the needle puncture wound may carry bacteria into the spinal canal. In such cases, Crowe's sign is of value. It consists of engorgement of the retinal veins on unilateral compression of the healthy side.

As cavernous sinus thrombosis is almost never a primary affection, it is important to consider the possible avenues of infection. Infection may travel by way of the anterior facial vein into the ophthalmic veins and hence into the cavernous sinus, or it may enter the anterior facial vein through one of its tributaries; the transverse facial vein or the pterygoid plexus of veins.

As soon as the disease process reaches the cavernous sinus, a number of other structures are immediately affected. The cavernous sinus completely surrounds the internal carotid artery, the oculomotor, trochlear, abducens, ophthalmic and maxillary nerves. The optic nerve lies in a cradle formed by the cavernous sinus, the superior and inferior ophthalmic veins and the circular sinus. The trigeminal nerve and ganglion lie in a similar cradle formed by the cavernous and superior petrosal sinuses, the basilar plexus and the inferior petrosal sinus.

When cavernous sinus thrombosis is caused by an organism such as the hemolytic staphylococcus aureus which produces marked destruction and lysis of tissue, the above contained structures are quickly affected with resulting paralysis of nerves and occasionally hemorrhage from the smaller branches of the internal carotid artery. The early effects have been described as the "Gradenigo syndrome", i.e., palsy of the external rectus muscle of the eye and symptoms referable to the sensory portion of the trigeminal nerve.

After the disease process has once been established very little if anything can be done. Our efforts must be directed mainly towards lay education. Suppurative lesions of the face should never be incised, squeezed or subjected to any form of treatment which will result in the destruction of the protective wall about the abscess and thus facilitate the subsequent entry of the infection into the anterior facial vein.

Dr. Reinhart:

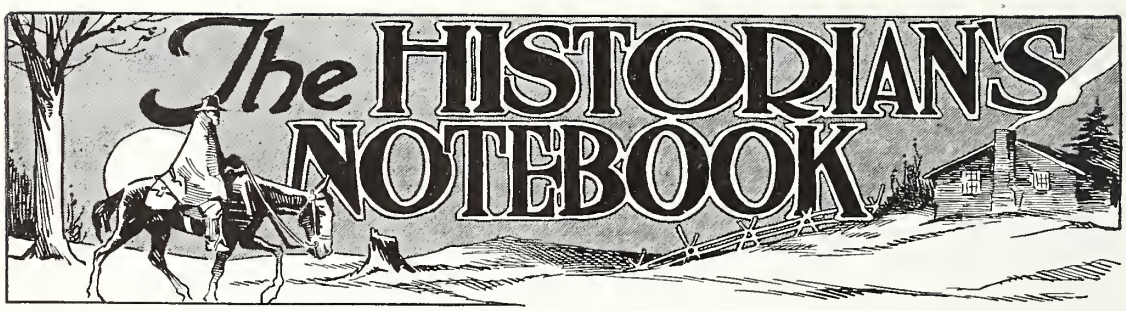
Anatomic Diagnosis: 1. Acute cellulitis of the face. 2. Right orbital abscess. 3. Right cavernous sinus thrombosis. 4. Acute diffuse staphylococcus cerebrospinal meningitis. 5. Staphylococcus septicemia.

The clinical course and anatomic diagnosis of this case illustrate the classical features of cavernous sinus thrombosis. The origin is often an insignificant "blackhead or pimple" of the face which are common with almost every individual and subjected to vigorous and repeated trauma by the barber, beautician, wife or husband, followed by an acute cellulitis of the face with extension to the cavernous sinus, acute purulent meningitis, septicemia and death. Cases in which recovery occurs may have an acute cellulitis of the face, but probably do not have a cavernous sinus thrombosis. The causative organism is most frequently a staphylococcus.

While the region of the nares and upper lip is usually described as the classical site of origin, and a "pimple" or furuncle as the classical lesion, cavernous sinus thrombosis has followed peritonsillar abscesses, acute tonsillitis, otitis media, mastoiditis, extraction of teeth, acute osteomyelitis of the mandible, facial erysipelas and other types of infection in all parts of the face.

Although the anatomical factors of venous drainage to the cavernous sinus, lack of valves in the veins, muscular mobility, etc., have been stressed, it is obvious that septicemia may and does arise from small furuncles in other parts of the body, and that the face is probably subjected to more cuts, abrasions, and trauma than any other comparable area of skin, with fortunately the relatively rare development of cavernous sinus thrombosis.

Clinical investigations should not be content with the isolation of an organism and giving it a name, such as staphylococcus for example. We must know more of the pathogenic characters of the particular organism isolated in any given case. Most staphylococci are relatively harmless to man, but occasionally we find staphylococci which are markedly hemolytic. Along with such a pathogenic manifestation, there is often found a necrotizing effect on skin and subcutaneous tissues, a leucocyte destroying action and a killing effect when introduced intravenously. Such toxic actions are apparently roughly parallel to the hemolytic activity. Hence an infection with a virulent hemolytic staphylococcus aureus might be expected to produce the picture delineated by this case.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

HISTORY OF THE SUMMIT COUNTY MEDICAL SOCIETY

(In Tabloid Form)

By A. S. McCORMICK, M.D., F.I.C.A., Akron, Ohio

THE medical history of Summit County began with the founding of the first settlement in the county, the village of Hudson, in 1800. Among the founders was Dr. Moses Thompson (1776-1858). He made his calls on horseback, on foot, in canoes, over a territory extending from Lake Erie to 50 miles south of Hudson. Tallmadge was the next village to be settled, in 1809, and among the founders was Dr. Amos Wright (1783-1845), the first of three generations of physicians to practice in Tallmadge. The other pioneer physicians in Summit County were: Jonathan Metcalf—Hudson, 1812; Titus Chapman—Akron, 1815; Luther Hanchett—Akron, 1815; Eliakim Crosby—Akron, 1820; Secretary Rawson—Richfield, 1824; Joseph Cole—Akron, 1827; Chester W. Rice—Cuyahoga Falls, 1830; Hosea Bliss—Northfield, 1834.

The doctor's lot in those days consisted of long hours, over a large territory, for little remuneration. Payment often was made in goods and Dr. Hand once received for his services two meals of wild turkey and a jug of whiskey. In spite of drawbacks, the doctor was one of the most honored men in his community.

The Summit County Medical Society was founded in 1842. Akron had 2,400 people, the United States 8,000,000, and John Tyler was President. From a small beginning the Society has grown to the fourth largest in Ohio today with 308 active and 32 associate, non-resident and honorary members. It has had 881 members and the biography of every one is recorded in the "historical roster" with pictures of nearly 300, including most of the founders of 1842. The Constitution and By-Laws have been rewritten and improved in 1866, 1884, 1898, and 1922. Only once has the name been changed—in 1884—when the title "Akron Medical Union" was adopted. The members quickly became disgusted with it and restored the old honored and present name.

The Author

● Dr. McCormick is a graduate of University of Western Ontario Medical School, 1910; member International Anesthesia Research Society; Cleveland Society of Anesthetists; chief anesthetist, Childrens Hospital; senior anesthetist and director, Peoples Hospital; consulting anesthetist, Citizens Hospital, Akron; secretary-treasurer of Summit County Medical Society.

Members of the Society have been prominent in other lines. Streets named after Eliakim Crosby (1779-1854), Samuel W. Bartges (1814-1882), Stephen H. Coburn (1809-1888) and Arthur Monteith Cole (1855-1922) indicate the importance of those members in business in Akron. Dr. Crosby became Akron's foremost, most farsighted and greatest citizen in business, and started Akron's growth into a manufacturing center. In 1871, Benjamin Franklin Goodrich, M.D., founded the great B. F. Goodrich Company. In Wadsworth, Nathan Sidney Everhard, M.D. (1841-1919) became president of the Ohio Match Company and other important industries. Lewis Everhard Sisler, M.D. (1860-1925) brought the late Harvey Samuel Firestone to Akron, and these two and Mr. Swinehart founded the Firestone Tire and Rubber Company. Dr. Sisler became vice president of the Firestone Bank, one of the few such institutions not affected by the depression.

Six members have served in the Ohio State Legislature from one to three terms: W. S. Hough, Cuyahoga Falls; E. B. Harper, Clinton; Eli Conn, Copley; and M. Jewett, L. S. Ebright, and H. S. Davidson, of Akron, all of them now deceased. Dr. Ebright was postmaster of Akron for several years.

The founding of four hospitals was almost en-

tirely due to the work of members of the Society. The City Hospital of Akron, founded in 1883; the Fair Oaks Villa in Cuyahoga Falls in 1894; the Peoples Hospital, Akron, in 1914. The physicians of Barberton played an important part in the founding of the Citizens Hospital in 1915.

Pioneers in medicine have been B. S. Chase, who in 1868 performed the first ligation of a femoral artery in this section of Ohio—an event which doctors for miles around came to see. In 1874 he performed a tracheotomy and later a thigh amputation. The first thorough test of the Flexner serum for meningitis was made in 1907 in the Akron Hospital by W. S. Chase and the late M. L. Hunt. The clinical chart now used in the hospitals of the world was designed by A. E. Foltz (1840-1917) in 1885. He sold the patent for 50 cents and the buyer made $50,000, a profit of 100,000 per cent. Other members whose inventions are used by surgeons, eye, ear, nose and throat specialists, anesthetists and pathologists are: M. D. Stevenson (1876-1915), R. F. Thaw, F. B. Roberts, C. R. Steinke, L. E. Brown, E. L. Saylor, H. R. Conn, A. S. McCormick, and L. A. Witzeman.

While the Summit County Medical Society is the most important medical organization in the county, other smaller groups have been formed at various times for scientific or social purposes. The senior is the Celsus Club, founded in 1893. The Medical Round Table was founded in 1935. The Summit Medical Society Golf Club has been active since 1923. The now nation-wide known Doctors Symphony Orchestra of Akron was formed in 1926 by members of the Society, and has had an uninterrupted and successful musical career since that time.

The medical profession is proud of its war record. It has been represented by its members in ten wars:

War of 1812	5
Civil War, 1861-1865	25
Russo-Turkish War, 1877, Roumanian Army	1
North West Rebellion, 1885 (Canada)	1
Spanish American War, 1898	7
South African War, 1899-1902	1
Philippine Campaign, 1899-1904	1
Mexican Border, 1916-1917	31
World War, 1914-1918:	
U. S. Army	110
U. S. Navy	9
American Red Cross	2
Austrian Army	1
British Army	9
Canadian Army	9
French Army	3
German Army	3
Greek Army	1
Italian Army	2
Russian Army	2
Total	151
Siberian Expedition, 1919	1
Grand Total for War Service	224

In addition, during times of peace, 51 members have served in the forces of the United States, Canada and Hungary.

In the Ohio State Medical Association many members have served on important committees. Among them, three have been Councilors of the Sixth District—the late H. H. Jacobs, M. D. Stevenson and H. S. Davidson. D S. Bowman was vice president of the Association some years ago. Serving on committees today are: J. G. Kramer, D. B. Lowe, R. T. Allison, and C. R. Steinke.

The Pickaway County Medical Society

January 18, 1876, a call was issued for a meeting of the medical profession, to be held upon the 25th inst., for the organization of the Pickaway County Medical Society, signed by Samuel D. Turney, E. D. Bowers, A. W. Thompson, G. A. Wilder, N. E. Jones, A. P. Courtright, Madison Hummel and A. H. Shaffer. In pursuance of this call, a meeting was held in the council chamber of the city buildings. S. D. Turney was chosen temporary chairman, and stated the objects of the meeting. On motion of Dr. N. E. Jones, the organization was effected by the election of the following officers: S. D. Turney, president; N. E. Jones, vice-president; E. D. Bowers, secretary; T. C. Tipton, treasurer.

At a meeting held February 6, the members considered and adopted a constitution, which was subscribed by the following physicians: N. E. Jones, S. D. Turney, J. R. Kelch, F. M. Black, A. P. Courtright, J. J. Baker, Howard E. Jones, C. Steward, J. C. Thompson, N. Potter, H. B. Smith, Samuel C. Helmick, G. E. Bragdon, George T. Rowe, E. H. Pratt (honorary member), E. D. Bowers, G. A. Wilder, A. H. Shaffer, M. Hummel, T. F. White, T. C. Tipton, A. W. Thompson, J. T. Jones, W. T. Kennedy, T. J. Kerkendall, Joseph Soliday, M. Brown, John B. May, R. H. Tipton, and T. Blackstone.

The first standing committees appointed were constituted as follows: F. M. Black, G. A. Wilder, A. P. Courtright, executive committee; Doctors Tipton, Hummel and Kelch, committee on admissions.

The society has, since its organization, continued to hold meetings at stated intervals, at which subjects of interest to the profession have been considered, and discussions had upon various topics.—Williams Bros., Publishers, 1880: History of Franklin and Pickaway Counties, Ohio—pp. 103.

Dr. Howard Dittrick, of Cleveland, and Captain F. L. Pleadwell, M.C., U.S.N., retired, of Hawaii, were the official delegates of the U. S Government to the International Congress of History of Medicine, held recently in Jugoslavia. The discussions dealt mostly with the folklore of Medicine.

TAKING A BIRD'S-EYE VIEW OF MEDICINE IN SOUTH AMERICA

PART I

By T. E. NEWELL, M.D., DAYTON, OHIO

IN this day all Europe and North America are making gestures to South America to gain her interest socially, economically and politically. Goodwill tours by our President, our air corps, and our navy have demonstrated that we in the United States are actively interested in our good neighbors to the South.

It seemed to be left to the Interstate Postgraduate Medical Association of North America, which has conducted medical tours to Europe during the past 15 years, to sponsor a medical tour to South America to promote a better understanding and goodwill between the doctors of these two continents. Therefore in March, 1937, a party of physicians sailed from New York to visit the universities and great medical centers of South America. There were 26 members in our party. The voyage was delightful and the South Seas were especially kind in showing us how wonderfully well the skies, winds, and sea could unite in making a perfect journey of "rolling down to Rio". Some of us felt a jolt or two when we went over the equator but we all were successfully initiated into Neptune's Court with no great casualties.

The tour was well organized and the medical clinics were especially fine. The mornings were spent in the medical clinics, hospitals, etc., and by noon the tropical climate made one feel that the Spanish idea of the "siesta" was sensible and the prearranged entertainment every afternoon in each city was thoroughly enjoyable and educational.

BRAZIL

On April 2 we entered the beautiful harbor of Rio de Janeiro. This city, of over two million population, was once a city of filth and disease and was shunned by all foreigners, but due to the work of doctors of medicine since 1900, the city is one of the most healthful in the world. We were told we might be free to drink the city water, and need not fear the food or milk supply!

Rio de Janeiro is the capital of Brazil, a country larger than the United States, abounding in natural resources. When one considers that what we call Brazil is just the outside boundaries, or sea coasts, we can get a faint idea of what future potential this country holds.

The doctors in Rio were free to tell us of the medical set-up there and, as Rio is the capital city, the medical set-up was not necessarily that of Brazil.

The hospitals are supported by benefit associations whose memberships vary from 25,000 to 75,000. One Catholic institution has 30,000 members. The fee one pays varies with age. It is approximately $100.00 for men and $110.00 for women. This fee entitles one to free care for life, hospitalization, doctors, drugs, lawyers, and even includes all burial expenses! This is possible because the staff doctors are not paid, and the hospital is very richly endowed. The doctors get the experience and prestige involved and, thereby, may aspire to some of the government jobs in the city, which pay from $50.00 to $100.00 a month. Private physicians complained that they have not enough income to afford an automobile, an average home, or even ordinary office conveniences!

In the Miguel Conti Hospital we saw a well equipped, new emergency hospital. One excellent idea especially noted was the isolation ward for pre-operative cases. The patient is kept in this ward for two or three days before an operation. He is kept quiet, has no visitors, no excitement, and receives special care. The ward is as quiet as a sound-proof room could be, and it must be as the doctors say a great benefit to the patient. The patient receives special religious attention, perhaps last rites, confessions, and religious consolation—all of which is in good order.

At the Beneficencia Portugeza Hospital we saw a beautiful building said to have cost $10,000 per bed. We saw the famous Dr. Gudin demonstrate his method of total sterilization. Operating room, dressings, surgical instruments, etc., are sterilized by the formalin method. This is done in a hermetically sealed, air conditioned, and air filtered operating room. The formalin is introduced into the room by a valve control. After a certain time the gas is neutralized by ammonia, and then the ammonia is neutralized by sulphuric or tartaric acid. Dr. Gudin claims that three or four clean operations may be done with one sterilization. All persons in the room at the operation are completely gowned, including the feet. By the gas method of sterilization, if a

The Author

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Submitted August 26, 1938.

scalpel or sponge is dropped to the floor, it may be picked up and used again even inside the abdomen with no fear of infection.

The ampitheater is over head, and we looked down from immediately above the operating surgeon. The lighting was perfect and although we were sweltering, the operating room below was air conditioned and very comfortable. The doctor claims he has less frequent wound infections by this method than by the method ordinarily used.

We visited the Hospital dos Espositos—or the hospital for Abandoned Children. Dr. Jose Martinho da Rocha is in charge. The baby is brought here in a basket suspended in a swinging window which receives the child. The window is turned and the child is taken from the basket inside. A bell announces the new arrival. There were 750 children in the hospital at that time, 250 were infants. The older children care for the infants and those who are sick. There are no trained nurses. Girls are kept here until they are 21, and boys until they are 18 years of age. All are educated and taught various trades. All clothing is made within the hospital. Many children were sick: lues, tuberculosis, and dysentery were most common. Thirty per cent of the infants die in the first year. The diseases most common to children in Brazil are lues, tuberculosis, malaria and helminthiasis.

We were given a reception at the Brazilian College of Surgeons. Professor Jayme Poggi presided and gave a formal address of welcome to the doctors of North America. Dr. Aresky Amorin presented a case he had operated on for hydatid cyst of the lung. X-rays were shown of cases both before and after operation. He has a large series of successful cases of this common disease of South America. Membership in the College is by invitation only, and is limited to 40.

On Tuesday, April 6, Prof. Clementino Fraga, Dean of the School of Medicine, University of Rio, met us in the morning and took us to his clinic. He demonstrated surgical procedures and technique. His work was very clever. He turned the medical section over to Prof. Annes Dios who made ward rounds. Dios had a very well worked-up clinic, showing cases of pernicious anemia, leukemia, malarial coma, cardio-vascular disease, pituitary disorder in diabetic patients with slight or intermittent glycosuria but with a marked hyperglycemia. Dr. Dios is a finished clinician and well read. He emphasized the clinical importance of the pituitary in diabetes and its controlling influences over lower centers, in that respect applying the laboratory advances of Houssay and Biassoti to clinical medicine.

At the instigation of Dr. Dios, the Brazilian government has established a branch station of the National Meteorological Service for the study and correlation of atmospheric changes in disease. Much data has been accumulated and is found to be of very great importance in the treatment of disease, especially in the tropics. Dr. Dios finds that atmospheric and meteorological conditions are responsible, in part, for certain complications, particularly cerebral hemorrhage, postoperative bleeding, and shock as it appears following surgery. When the weather is hot, or the humidity is excessive, and barometric pressure rises they avoid all surgical operations possible.

At the Deutches Krankenhaus, Dr. Maurity Santos, a very clever surgeon did a vaginal hysterectomy for carcinoma of the cervix uteri. He made Suchart's incision. Radium is not used here for carcinoma of the cervix. Dr. Santos also operated on a case for rectal stricture complicating granuloma inguinale, a very common disease in Brazil. He did a two-step operation by his own method. He did a combined abdominal and perineal operation, first liberating the diseased bowel through the abdominal opening, then, by an incision to the side of the rectum, resected the diseased bowel, saving the sphincter. The proximal end of the bowel was then pulled through the anal opening and was split for several inches, each half being sutured to the buttock. A small tube was inserted into the bowel and four strips of iodoform gauze were placed into the ischiorectal fossa. The split portion of the protruding bowel was then allowed to slough. Dr. Santos has operated on 50 such cases. All cases showed a positive Frie's test.

We visited the hospital for contagious diseases, including tuberculosis. Typhoid fever, malaria, and dysentery are all isolated here. All children are given diphtheria toxin antitoxin immunization and smallpox vaccination. There was one case of poliomyelitis, the patient being very ill. Poliomyelitis runs a mild course here and seldom paralyzes. We saw many severe cases of diphtheria, and many cases of post diphtheria paralysis.

On April 7 we left Rio by train for Sao Paulo, a full day's journey, through beautiful mountainous country. We saw many cattle; miles and miles of coffee and banana plantations; large orange groves; tropical river valleys; and high plateaus which kept our interest every mile of the way. Sao Paulo is the "Chicago" of Brazil, a thriving industrial city of 1,200,000 population. It is ideally located on a high plateau in the midst of natural resources no other city in the world can boast of and has a delightful climate.

The doctors here were more industrious and optimistic. They were happy and prosperous, not being hindered by the same political handicaps on medicine as in Rio. The doctors practiced more as private physicians here and were, in general, more enterprising and energetic. Our visit to the University of Sao Paulo was by far the most impressive feature of our stay here.

The medical school is very new and ultra modern in every way. The teaching facilities are remarkable and, with the wealth of clinical material and excellent faculty, the school is beyond doubt the leading institution of its kind in South America. It was built at a cost of $4,000,000. $2,000,000 were given by the Province of Sao Paulo and $2,000,000 by the Rockefeller Institute.

Professor B. Montenegro was probably the leading surgeon in Sao Paulo. He had his surgical training in Philadelphia under John B. Weaver, and demonstrated his technic for gastric resection for stomach ulcer. He removes approximately two-thirds of the stomach, and uses spinal anesthesia given between first and second lumbar vertebra with percaine. This is similar to nupercaine, made by Ciba. Among his first 500 cases operated upon, he has found three recurrent jejunal ulcers but none in the last 700, due to more extensive resection. His pre-operative preparation consists of thorough blood and urine study. He uses determinations of carbon dioxide in the blood (Van Slyke) as indications for glucose and subcutaneous saline injections. He frequently uses pre-operative intravenous glucose, but not post-operatively, unless especially indicated. Blood transfusions are seldom done.

At the Santa Casa Hospital, the medical section was given a real treat by Professor Jairo Ramos. He demonstrated a thoroughly worked up case of lipoid nephrosis, showing it to be a transition stage into parenchymatous nephritis; a case of Ayerza's disease, claiming that this is not a pathological entity and should not be designated nosographically as a disease, but it might well be called "black cardiac disease", accompanied by polycythemia. He presented a case of aneurism of the aorta with erosion of vertebrae and ribs. We were taken into wards with men sitting up in bed each with nasal catheters held to the cheeks by adhesive tape. These patients were made to swallow an air bag covered with taffeta silk and then hydrostatic pressure is applied at frequent intervals. These were said to be vitamin B-1 deficiency cases with cardiospasm and magacolon with typical electrocardiographic changes. This is a very common disease among these natives of the large coffee plantations. Prof. Ramos said these cases respond very well to treatment which consists of dilation of the sphincters mechanically and administration of foods rich in all the vitamins and they find but few recurrences. If the sphincters higher in the colon are involved surgical intervention is also successful.

Dr. Ramos also presented a series of carefully studied cardiacs with extensive electrocardiographic records. He gave his ideas concerning bundle branch block and showed his animal experimental work, proving the European idea of right and left bundle branch block as contrary to our belief in North America. He told us he plans to study with Dr. F. N. Wilson at Ann Arbor, Mich., during the coming year. I anticipate he will find some opposition in convincing Dr. Wilson concerning this particular point.

We were shown a case of common duct drainage in which the duct contracted under the influence of morphine. Lipiodol was injected into the common duct. When morphine was given the lipiodol was forced back into the pancreatic ducts showing that morphine caused contraction of the sphincter of Oddi.

We visited the Pro Matre Paulista Hospital, a private maternity hospital, owned and operated by a group of twelve doctors. It is an open hospital and any reputable doctor may take his patients there. It was ultra-modern, with clean delivery rooms, and the patients' rooms were elegantly furnished. One feature which these Brazilians observe as an old Spanish or Portugese custom seemed singular. Some of the floors had suites of rooms—one room for the mother and baby, another designated the reception room where the father receives guests, passes out cigars and receives greetings and congratulations. Another beautifully furnished room is the bedroom for the father who goes to bed for two days. This is the only place known where the father is given due consideration for the rigors of child birth. These Latins may be ahead of their time in some things!

On Thursday afternoon, April 8, we visited the famous Butantan Snake Farm located a few miles outside the city of Sao Paulo. Prof. Arfranio Amaral, its director, is a graduate of Harvard School of Hygiene in 1924. He was a very delightful host. He took charge of our group personally and showed us every department of the institute. He spoke very good English and made us feel that unexplainable Latin American hospitality and sincerity.

The institute was originally a private institute devoted to the study of the plague and smallpox, but now it is a self-supporting state institution with a wide field of scientific work. The greatest work is in antivenom production, but they have very important research departments in immunology, endocrinology, biophysics, and serology. Prof. Amaral discussed their efforts in developing laboratory animals especially suited for antisera production.

Snakes are obtained from plantations of the interior in exchange for antivenom. This antivenom is sent to every locality and the natives are taught how to administer it to themselves and thereby many lives are saved. They have developed specific antivenom for the rattlesnake and pit viper, also a polyvalent serum to be used when they are not sure what type of snake is the offender. He stressed the importance of the early administration of serum, and that the polyvalent

serum is used till the patient develops certain signs which make the diagnosis simple, and the follow up treatment can be more specific. Many interesting facts were mentioned; the dosage is inversely proportioned to the weight of the patient; also only 30 per cent of cases bitten require treatment, and 70 per cent will recover without any care. This is due to many factors such as, the location of the bite on the leg, the depth of penetration, the clothing covering the particular part and the angle at which the snake struck. He stressed the importance of symptoms developing in the patient following snake bite, different types of reaction following the bites of different kinds of snakes. They have very venomous toads in Brazil and antivenom is made for distribution also.

Out of one species of snake, Prof. Amaral has isolated 12 different poisons, one affects cardiac muscle, one causes lysis of white corpuscles, one destruction of red blood cells, one poisons smooth muscles, one coagulates blood, one causes paralysis of the phrenic nerve, and one affects the brain. He said the antivenom is beneficial in treating purpura hemorrhagica.

Some very interesting work is being done on endocrinology under the direction of Dr. Thales Martins. The stimulating influence of Dr. Houssay of Buenos Aires seemed to be felt here and the work was especially interesting. They had transplanted an ovary in the eye of a female animal. This ovary periodically developed follicles in the cavity of the eye which could be seen with an ordinary magnifying glass. In another animal the tubercinereum had been transplanted in the eye of a rat. The animal showed a striking growth of the incisor teeth which became so long that they appeared as coiled ram's horns. This experiment suggests the growth factor in the tubercinereum. Dr. Martins is now producing a diphtheria resistant guinea pig by crossing the ordinary pig with the Brazilian wild strain.

On April 9 we made the rounds with Prof. Montenegro at the Sanitoria Santo Catherina. He demonstrated many surgical procedures which have been proven successful by his remarkable methods and technic. He showed a patient with an intractable post-operative hernia, which he repaired by isolation and transplanting the sartorius muscle, freeing the distal end of the muscle and carefully preserving its blood and nerve supply at the proximal end. The muscle is brought over and sutured to the rectus muscle. Prof. Montenegro believes this method is superior to the usual fascial transplants. This method was devised by Dr. Alberto Gutierrez of Buenos Aires, whom we later met in Argentina.

At the Santa Casa de Misericordia, or tuberculosis hospital, we found a hospital filled to capacity and mostly with far advanced cases. There were 500 beds and we were told there were 5,000 on the waiting list. The doctors were equipped to do very good work, but were handicapped by not being able to determine what type of cases should be admitted. Medication consisted largely of placebos and cough medicines. Attempts at prevention of intestinal tuberculosis by diet, cod liver oil, and orange juice were unsuccessful. Tuberculosis is by far the greatest killer in Brazil. Education as to prevention and early diagnosis is far from a fair beginning but the doctors were very enthusiastic about plans for this important work in the future.

On April 10 we left by a cable train for Santos, a city of about 50,000 population and the seaport of Sao Paulo. Ninety per cent of the world's coffee is carried over this—the world's most remarkable railroad. It is considered a very great engineering feat because of the steep inclines, the many tunnels, and the extensive soil erosion projects necessary to protect it from the heavy rainfall of this locality which is 180 inches annually!

At Santos we visited the beautiful Orchid Park where we saw thousands of orchids growing in the tropical jungle, which has been preserved for the many visitors who come to this city. The many jungle flowers were truly a heaven for the camera enthusiast who has a yen for color photography.

URUGUAY

The voyage to Montevideo was one never to be forgotten. The steamship, "Southern Cross" of the American Munson Line, was like a peaceful home, gliding over a glassy blue sea that could not be surpassed in beauty anywhere in the world. It gave us an opportunity to review and correlate our notes on what we had seen and learned in Brazil.

This small country is about the size of Ohio. Its chief industry is agriculture, and it is noted for its extensive sheep raising. We were struck by the light complexion of these Spanish people in contrast to the dark color of the Brazilians. While the negro and the Portugese in Brazil have held no race lines and have or are forming a new race of people, the Uruguayans have preserved their white ancestry. This was especially noticeable after spending these weeks in Brazil.

These people have advanced far in their program of public health. Tuberculosis and syphilis control have been actively studied and much has been done in the way of education of the public. A number of years ago it was estimated that 25 per cent of the population was luetic but now this percentage is greatly reduced. Legislation to make syphilis a reportable and completely controlled disease is now before the Senate and is sure to be adopted. All citizens may be subjected to Wassermann and Kahn tests, the cost is to be defrayed by a 1 per cent land tax.

One feature of tuberculosis control is the isolation of pregnant women who are found to be tuberculous. They are isolated in special hospitals until delivery. Then the child is taken

from her, and she cannot have or even touch the child till it is eight years old, and then only if she is well. What a tremendous stimulus to make these women want to get well! Dr. Julio Abanzo, the pediatrician in charge of all the health work of children in Uruguay, when showing us a playground of 400 of these children said, "Now these are all saved to our country. They would all be dead if we did not follow this procedure."

At the Pasteur Hospital we were given a clinic on echinococcus disease, the incidence of which is very high in this country. A man who comes from the country, wears high boots, and has a large liver, may be safely diagnosed hydatid cyst. In lung envolvement the X-ray is of far greater diagnostic value than eosinophilia or the skin test. A two stage operation is of choice and these surgeons' experience is quite extensive and successful.

We were shown many drawings used as posters in the campaign to educate the public concerning the transmission of this disease from animal to man.

Prof. Fournier at the School of Medicine held an interesting clinic on endocrinology. Cases of acne vulgaris and facial hypertrichosis were successfully treated with folliculin ointment. Cases of thyroid and pituitary dysfunction were shown to be related to fetal lanugo, undergrowth, delayed ossification, slow dentition, mental retardation, and delayed speech. A case shown was a patient with hypothyroidism who received large doses of thyroid and showed premature ossification.

Medical societies of Uruguay are organized into a federation of medico-scientific societies. It sends 23 medical journals to all its branches. Of these, 21 publications come from the United States!

We were royally entertained at the American Embassy, the night before we sailed. Mr. Lay, the American ambassador, was ill but Mrs. Lay and the staff members of the Embassy were especially hospitable and friendly. Mrs. Lay asked if there were any Buckeyes in our party and I, being the only one present, was happy to find she hailed from Columbus. We were sure that such sincere friendliness and hospitality as these folks had would be a distinct asset to our country in any foreign capital.

As was the case in every city we visited, the many friendships we made added to the sadness of bidding farewell. We shall never forget the fine friends of Montivedeo. We sailed on the night of April 15 for Buenos Aires and, as the river steamer sailed away, the flickering lights of the city of Montivideo seemed to remind us of the city beautiful filled with fine people.

BUENOS AIRES

Next morning, after the usual nuisance of quarantine inspection, presentation of passports, photographs, etc.; we were met on the upper deck by two gentlemen with whom we were to become well acquainted in the next few days of our visit in this beautiful city of Buenos Aires. Prof. Castex and Dr. Dowling spoke to us in perfect English and made us feel at home from the very first.

Buenos Aires is a thriving capitol city of two million people, located on the Platt River at the sea. This great river is 40 miles wide at its mouth and the many ships going and coming gave evidence of the great commerce of this city. The harbor is too shallow to permit the large seagoing vessels to enter. The city has beautiful streets, modern buildings, and fine hospitals. We were surprised to see how the city reminded us of our own large cities of the United States with its city parks, department stores and shops, many apartment houses, traffic jams, buses, street cars, and subways. It is a very healthful city with sanitation, water supply, sewage disposal, and food inspection; similar to our modern cities. They have one medical center and ten general hospitals all assisted by the government.

At the National Clinical Hospital, the clinics given demonstrated to us the fact that here the practice of medicine and surgery is at its best. The moment we were seated in the ampitheater for the first presentation, the procedure of the program was as rhythmic as clock work. Each man was well prepared, full of enthusiasm, and extremely interesting. Not a single flaw could be found, good snappy histories, rapid presentation of salient facts of physical and laboratory findings, and precise and convincing conclusions. The stimulating and guiding hand of Prof. Jose Arce, Dean of the medical faculty of the University of Buenos Aires; and Prof. Mariano Castex, who holds the chair of Internal Medicine, could be felt in each of the 26 demonstrations. I am sure that such punctuality and perfection in clinic presentation could not have been attained without previous rehearsing and criticisms.

A paper condemning the use of thorium dioxide in diagnosis of liver disease was followed by a demonstration of pleural blebs on the surface of the lung, visualized by the endoscope intrapleurally, showing these lesions as the cause of idiopathic spontaneous pneumothorax. A series of cases of meningioma involving the optic tract were shown: cataract removal by pneumatic forceps or suction spoon; an operation for dacryocystitis; a case of progeria; premature senility with senile type of loss of teeth in a boy with congenital syphilis; a bronchographic demonstration of cancer of the lung; and a demonstration of the diagnosis of cancer of the lung by lung puncture which is much talked of in South America and Europe now.

(Continued in December Issue)

It Is Your Patriotic Duty to Work for Qualified Candidates Now and To Support Them at the Polls on November 8

ON Tuesday, November 8, the physicians of Ohio, together with other citizens, will have an opportunity through the ballot box to make known their wishes as to how they believe the administrative activities of government should be conducted and what kind of persons should represent them in administrative offices and in the state and national legislatures.

It is the patriotic duty of every citizen to vote at this important General Election. It goes without saying that every voter should be fully informed regarding all candidates so he may vote intelligently and for qualified candidates.

Recent developments at Washington, and elsewhere, clearly demonstrate that the medical profession as a whole has a bigger stake in the November 8 election than ever before. **The medical profession is not, and should not be, partisan so far as party politics goes.** It must not regard public affairs from a selfish point of view but from the viewpoint of what is best for the health and welfare of the people and the maintenance of those principles and standards which will provide all persons with good medical care.

During the past month all candidates for important administrative and legislative offices have been interviewed by committees of physicians working under the supervision of the Sub-Committee on Legislation of the State Association. These committees and local legislative committeemen and county society officers have done a splendid job. **Information on the candidates has been assembled and sent to the legislative committeeman or legislative committee chairman of all county medical societies for him to disseminate to the members of his local society.** If you have not received this information from your legislative committeeman, phone him or your county society secretary at once, and request him to make it available. **All the fine work which has been done will go for naught unless every physician makes use of the information available to him.**

Your vote alone will not be sufficient. After checking the information, make it available to your relatives and friends—all friends of scientific medicine and public health. **Now is the time to do this—before the General Election.**

The medical profession now is taking an active part in politics in an effort to preserve principles which are fundamental in good medical care and good medical practice. We are not interested in party politics but **we are interested in seeing that only qualified candidates, regardless of party, are elected to public offices.**

Success or failure of the efforts of committeemen and officers of the State Association and county medical societies will depend entirely on how much active interest is displayed by the 6,000 members of the Ohio State Medical Association. I appeal to you all to take this situation seriously; **use the information assembled for you, effectively; decide which candidates are qualified for the offices sought; actively work for them; and vote; get your relatives and friends to vote for them on November 8.**

Barney J. Klein, M.D.
President

WHAT ABOUT THE CANDIDATES? GET THE INFORMATION FROM YOUR LOCAL LEGISLATIVE COMMITTEEMAN. HE HAS IT

ON October 18, information pamphlets regarding candidates for various public offices, to be voted on at the General Election on November 8, were distributed from the Headquarters Office, Columbus, to the legislative committeeman or committee chairman of each component county medical society of the Ohio State Medical Association and intended for distribution by them to the 6,000 members of the Association.

The information included in the pamphlets was obtained by committees of physicians through interviews with candidates and in some instances from personal communications over the signature of the candidate. The material was assembled and analyzed by the Sub-Committee on Legislation. The pamphlets were distributed on authorization of The Council. Local legislative committeemen were instructed to disseminate the information by mail or otherwise to all members of their county medical societies, together with information regarding local candidates.

Following is the text of the Sub-Committee on Legislation's pamphlet pertaining to candidates for some of the important state-wide offices, which pamphlet was accompanied by supplemental pamphlets pertaining to candidates for district congressman and state senator:

* * *

INFORMATION REGARDING CANDIDATES

A Bulletin Issued by the Ohio State Medical Association, 79 East State Street, Columbus, Ohio, on Authorization of The Council

This is a non-partisan bulletin containing information for the members of the Ohio State Medical Association. The information regarding the attitude and viewpoints of candidates on medical and public health questions was obtained by committees of physicians, working under the direction of the Sub-Committee on Legislation of the State Association, through interviews or from communications received from some of the candidates in answer to specific questions submitted to them in writing. Each reader should carefully analyze, compare and evaluate the following statements before reaching a decision as to which candidates are entitled to his support. No attempt has been made in this bulletin to supply information other than that pertaining to the candidate's attitude on medical and public health questions. It is up to each reader to familiarize himself with the record and attitude of each candidate on other matters of public interest, using that knowledge and the information contained in this bulletin to guide him, his relatives and his friends at the polls on Tuesday, November 8.

Although it is most important that each candidate be evaluated on the basis of his views on medical and public health questions, judgment relative to his qualifications for public office should be based on his all-around fitness for that office, including a sound attitude on medical and health matters.

(Names of candidates appear in alphabetical order.)

GOVERNOR

John W. Bricker (R), Columbus — Former Attorney General of Ohio. Mr. Bricker stated that as a professional man he realizes the necessity for maintaining high professional and educational standards in medical practice and public health administration. He said that present legal provisions regulating the practice of medicine and all its branches must be maintained for the protection of public health and public welfare, and that he would be opposed to changes in present legal requirements which did not have the approval of the medical profession.

Mr. Bricker declared that careful selection of personnel for administrative duties in the field of public health and medical activities of the government is important and that he would consult the leaders of the medical profession in making such appointments.

Stating that it is function of government to assist the needy, Mr. Bricker declared that where it is necessary for government to provide funds for medical services for the poor, such programs should be administered locally, in cooperation with the medical profession. Also, he said that the same principle of local administration and local cooperation with medical societies should be applied in the public health activities of the government. He declared himself as definitely opposed to the socialization of the practice of medi-

cine through any programs which would cause governmental interference in or control of the private practice of medicine.

Charles Sawyer (D), Cincinnati — Attorney. Former Lieutenant Governor of Ohio. Mr. Sawyer expressed himself as appreciating what the medical profession has done and is doing toward the protection of public health and in maintaining high standards of medical practice, medical service and medical education in Ohio. He stated that legal safeguards to protect the public against health hazards and incompetent practitioners must be maintained and that no changes in such statutes should be made unless they had the approval of the medical profession.

Mr. Sawyer declared that medical and public health activities carried on by the state government should be worked out in cooperation with the medical profession through its official units, with administration left to local governmental units, assisted by members of the local medical profession.

Expressing a belief that the medical profession is the best informed group on medical and health questions, Mr. Sawyer said he would avail himself of the experience and counsel of leaders of the profession when seeking advice and information with respect to the qualifications of personnel for various administrative offices dealing with medical and public health activities.

LIEUTENANT GOVERNOR

Paul M. Herbert (R), Columbus—Attorney. Very sympathetic to medical profession's policy with respect to keeping professional and educational standards in medicine at high level. Opposed to weakening of Medical Practice Act. Record while member of Ohio Senate satisfactory. States he will continue to consult and follow the advice of the medical profession on medical and public health matters. Opposed to centralization of governmental activities and regimentation of business and the professions. Definitely opposed to socialization of medicine. Welcomes advice and counsel of physicians.

James Metzenbaum (D), Cleveland—Attorney. Believes in maintenance of high professional and educational standards in medicine. States that he always has consulted members of the medical profession on medical and public health questions and will continue to follow that policy. Definitely opposed to the socialization of medicine. Record while member of Ohio Senate on medical and public health matters satisfactory. Opposed proposals to weaken Medical Practice Act. Actively supported amendments to strengthen Dental Practice Act. Brother of a physician.

UNITED STATES SENATOR

Robert J. Bulkley (D), Cleveland—Incumbent. Attorney. States that his present attitude with respect to the medical and public health activities of the Federal Government was expressed in an address at the Democratic State Convention in Columbus, September 22, 1938, when he said: "We cannot say we have reached the end of Federal service to various human needs. We have reason to hope that health insurance can be developed so that without violence to the delicacy of any of the relationships involved in medical practice, it may be possible for the poor to be assured of competent medical help without ruinous cost".

Amplifying this statement in personal interviews, Senator Bulkley stated he felt that many people at present are unable to finance adequate medical care; this subject requires a large amount of careful study and thought; "revolutionary changes in a hurry" should not be attempted; programs should be developed through an "evolutionary process"; voluntary insurance plans should be established first; compulsory plans may have to be set up if the voluntary plans do not succeed; the physician-patient relationship and principle of free choice of physician should be recognized and preserved when possible; management and control so far as possible should be left to the medical profession.

Expressing a belief that physicians should be remunerated for the care of the indigent, he stated such activity should be primarily in the hands of local units but where conditions are such that local and state units cannot handle the situation the Federal Government should assume the burden. This principle should be applied generally in all medical and health activities involving the government, he said, as "the Federal Government is only there to do the things which the local governments cannot do for themselves".

Senator Bulkley stated he welcomed and would seek the advice of the medical profession on such questions.

Robert A. Taft (R), Cincinnati—Attorney, former Speaker of the Ohio House

of Representatives and member of the Ohio Senate. He is definitely opposed to socialization of the practice of medicine through governmental control and the concomitant regimentation of the profession. Opposed to socialization and regimentation of business and professions generally. Believes in and will support the maintenance of high professional and educational standards to insure that the public will continue to receive a high standard of medical care. Favors non-compulsory health insurance to be planned and supervised by the medical profession to provide medical and hospital services for low-income groups. Wants all public health activities to be properly financed and efficiently administered but believes administrative supervision should be in the hands of state and local governmental units with the cooperation of local ethical medical societies.

Record on medical and public health questions very satisfactory.

CONGRESSMAN-AT-LARGE

(Two to be Elected)

George H. Bender (R), Cleveland Heights—Attorney. Former member of Ohio Senate. Submitted the following statement: "To support a blanket proposal to submit all medical and health problems to political government regulations impresses me as both unnecessary and unwise. Such vital matters as the management, training and personnel selection of our medical schools, clinics, hospitals must be kept free from any suspicion of partisan politics. The research conducted by private institutions should not be regimented into patterns dictated by governmental officers. I shall always make an effort to secure advice of those groups best equipped to offer it on every legislative problem. On medical questions any layman should be eager to seek guidance. I will be most willing to follow the suggestions of competent medical groups or individuals before voting on problems affecting them."

L. L. Marshall (R), Euclid—Attorney. Former member of Ohio Senate and Ohio House of Representatives. Record on medical and public health questions satisfactory. Definitely opposed to socialization of medicine and regimentation of business and professions. Believes in and always has supported high professional and educational standards. States he always has consulted and followed the advice of members of the medical profession on medical and public health questions, and will continue to do so.

John McSweeney (D), Wooster—Incumbent. Former State Director of Welfare Record on medical and public health questions satisfactory. States he has been studying the question of socialized medicine and "have so far been unable to arrive at any real need for this program". Amplifies this statement with the following comment: "This is a very serious matter and no legislator should undertake a program like this unless it is thoroughly understood. . . . I am opposed to it at the present time and shall not change my stand unless someone is able to present new arguments to me." Welcomes the advice and counsel of the medical profession.

Stephen M. Young (D), Cleveland Heights—Attorney. Former member of the Congress. States he is in favor of the private practice of medicine. States further, that he does not understand socialized medicine well enough to form an opinion but will listen to medical advice on the subject. Expressed willingness to cooperate with the medical profession and to consult physicians on medical and public health proposals.

This Is the Kind of Public Relations Which Will Pay Dividends

Ohio physicians are not hesitating to express their views on the subject of socialized medicine before luncheon clubs and other public gatherings. Addresses on the subject made during the past few weeks include the following: Dr. L. H. Trufant, Oberlin, secretary of the Lorain County Medical Society—Oberlin Rotary Club and the Elyria Exchange Club; Dr. Milton D. Cohen, chairman of the medical economics committee of the Cleveland Academy of Medicine—Moses Cleveland chapter of the D.A.R.; Dr. Ralph G. Carothers, Cincinnati—Norwood Kiwanis Club; Dr. Charles H. Bailey, East Liverpool—Lions' Club; Dr. R. R. Reynolds, Massillon—Rotary Club; Dr. George Blackford, Eldorado—New Madison Kiwanis Club; Dr. Jonathan Forman, Columbus, Editor of *The Ohio State Medical Journal*—Ashland Lions' Club; Dr. L. Howard Schriver, First District Councilor Ohio State Medical Association—Cincinnati Civic Club; Dr. G. A. Woodhouse, secretary, Miami County Medical Society—Troy Kiwanis Club; Pickaway District Meeting, Ohio State Nurses' Association, Tippecanoe City Rotary Club and Covington Kiwanis Club.

LOCAL LEGISLATIVE COMMITTEEMEN AND OFFICERS MEET WITH STATE ASSOCIATION OFFICIALS TO PERFECT PLANS FOR PRE-ELECTION ACTIVITIES THROUGHOUT STATE

APPROXIMATELY 160 physicians, representing 67 counties, attended the Legislative Conference of the Ohio State Medical Association at the University Club, Columbus, on Sunday, October 2.

Those attending by special invitation included legislative committeemen, presidents and secretaries of county medical societies, members of the Sub-Committee on Legislation and officers of the State Association, and delegates to the American Medical Association.

Object of the meeting was two-fold: First, to acquaint local committeemen and officers with and to offer an opportunity for discussion of some of the serious legislative, economic and social problems confronting the medical profession, especially the situation at Washington; second, to explain to the local committeemen and officers methods which had been devised or planned to meet these problems and to solicit their active support in making the program of the medical profession of Ohio, as set up by The Council and Sub-Committee on Legislation, effective.

An enthusiasm which surpassed that of previous years was displayed by those in attendance, especially with respect to the methods formulated to provide all members of the State Association with accurate and authentic information regarding the attitude of candidates to be voted on November 8 toward medical and public health questions, based on personal interviews with candidates or on communications received from some of the candidates.

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Purpose of Legislative Conference Explained by Dr. Hein

The conference convened at 10:30 A.M. with Dr. D. C. Houser, Urbana, chairman of the Sub-Committee on Legislation of the State Association presiding. After thanking those present for attending and stating that the large attendance indicated an unusual interest throughout the state in legislative matters, Dr. Houser presented Dr. B. J. Hein, Toledo, President of the State Association, who spoke on the subject: "Why A Legislative Conference?"

Dr. Hein opened his talk by pointing out that there are many important problems coming before the Association both in a legislative and economic way, which demand the closest consideration of all members and that this conference afforded an opportunity for the county society officers, and legislative committeemen to familiarize themselves with these recent important developments.

"The National Health Conference held in Washington in July has brought before our organization the question of Federalized medical service," he said. "Sponsors of that conference also have recommended an expansion of the public health service; an increase in hospital facilities; medical care for the indigent, a general program of medical care, and a program for compulsory sickness insurance covering the entire population of the United States. That we agree with this in its entirety cannot be said.

"Organized medicine today has the problem before it of protecting the high standards of practice which have been attained. Experience in other countries where the type of practice as recommended at the National Health Conference, has been administered, has tended to lower the standards of medical care.

MUST HAVE UNITED ACTION

"The officers of your State Association are cognizant of these problems, and they have spent many hours in their deliberations. They welcome this opportunity today to acquaint the officers of the local county societies and the legislative committeemen with what they have been doing, and what they are attempting to accomplish in the future. This program will require the active support of every member of organized medicine in the State of Ohio. The officers alone cannot solve these problems. You must go back to your local societies and mobilize our 6,000 members for activities in combating them.

"At present we are faced with an election, and it has been necessary for the various legislative committeemen to interview all the candidates. The stand of the various candidates with regard to medical practice must be ascertained. This is not a political affair in the sense of party politics. We are not interested in a candidate's politics.

We are interested in his views on the practice of medicine in our nation and community. When this information is assembled, then the legislative committeemen, together with the presidents and secretaries of the various county societies must report back to their respective counties and disseminate this knowledge to the individual members. It is only in this way that our maximum influence can be felt. It is necessary for the local county society officers and committeemen to stimulate political and legislative activities in your various societies. Our individual members must be aroused to its importance. Legislation is certain to play a leading role in the problems which will confront us in the near future. We ask no legislator to pledge himself to anything. We only ask an intelligent understanding of health problems and a willingness to counsel with our Association on legislation pertaining to health.

"This meeting will afford an opportunity for the various members assembled here to ask questions and your state officers will welcome any suggestions which you have. Of special interest is the excellent work which is being accomplished by the Sub-Committee on Legislation and the Special Coordinating Committee, whose principal task has been the consideration of the problems brought forth by the National Health Conference. Today we are privileged to hear reports from these various committees, with an address upon the recent activities of the House of Delegates of the American Medical Association.

"In closing, may I say that the Ohio State Medical Association is interested in maintaining the high standard of practice in our state. We realize that we have problems to solve, such as those dealing with the medical indigents, medical service to low wage groups, etc., and we accept this responsibility. Let us try to solve them without sacrificing any of the high ideals which have motivated us in the past. We still maintain that the welfare of the public is of prime importance. We must preserve as much as possible of the physician-patient relationship, so necessary to successful practice. We must insist that the best medical practice is open to all persons, and we must protect the public against unscrupulous practitioners. Through our medical organizations we must maintain a unity, protecting the continued advancement of the medical science, and the control of medical service must be in our hands."

Dr. Schriver Reviews Recent National Health Conference

Dr. L. Howard Schriver, Cincinnati, Councilor of the First District, presented a "Resumé of the Recent National Health Conference at Washington and Possible Health Insurance Legislation".

Dr. Schriver pointed out that the National Health Conference might be viewed as the culmination of what occurred in years before, namely, the results of the investigations of the Committee on the Costs of Medical Care and various foundations and contributed to by individuals who are seriously interested.

"I think we must interpret it and analyze it with a fair mind," he said. "We must assume at least that all persons who attended that conference had a sincere desire to elevate the standards of public health".

Continuing with comments regarding the important recommendations discussed at the Washington conference, Dr. Schriver said:

EXPANSION OF HEALTH SERVICES

"In the final analysis, this conference drew up five recommendations, the first of which was a national expansion of public health service. I don't think there is an individual doctor or medical organization that would take any exception to that program in its generality. I think the reason we take no exception is that we realize that fundamental public health conditions are more important than the individual therapeutic administration to the sick when we value the health of our community, and when I speak of the 'community', I speak of the United States. I am certain all of us believe the only way we can reduce the mortality and morbidity rate is by attacking fundamental public health conditions that prevail throughout the land. So I am certain the American Medical Association and Ohio State Medical Association and we as individuals approve of any such intelligent program.

HOSPITAL BUILDING PROGRAM

"The second recommendation was for the expansion of hospital services throughout the United States and I think in general that must be approved but exception must be taken to where these hospitals are planted. Every metropolitan area from the heyday of prosperity overexpanded in hospitals only to find today their overhead is so great that they can hardly afford to keep their doors open. So a great deal of care should be exercised in locating hospitals and where possible, hospitals should be strategically located to benefit both the individual and public health. Therefore, we must go very slowly in this expansion of hospitals in the United States.

CARE OF THE INDIGENT

"The third recommendation was for the better care of the needy and I feel certain again that I can speak with authority that the medical profession is only too glad to cooperate with any intelligent movement that will increase the standards of medical care to the poor. I am not so sure that the medical profession is open to criticism regarding medical care to the poor. I think we need only do one thing and that is compare the statistics with those of any country in the world, no matter what type of practice exists, and we will compare very favorably. And, I might inject, I think the American medical care picture compares very, very favorably despite the fact the fundamental principles of public health are not what they should be and we desire them to be. In other words, we are in that position without the communities giving us the implements to do a better job. Those are the things that guide us in the public health picture.

HEALTH INSURANCE

"The next thing is some sort of health insurance. It has been said it is intended to cover all walks of life in the United States. If that is the intention, I think it is very, very definitely a wrong one. I think there are certain people on whom it is a tremendous burden for them to take care of the catastrophic illnesses and hospitaliza-

tion associated with them. It is with them I would be willing to cooperate in spreading costs provided that scheme is guided by the medical profession in those things which are intangible, which are of greater value than material services; those things which we cannot accurately describe that represent the standards and ethics of the practice of medicine that mean so much to the sick individual. Therefore, I do not think that a widespread, all-comprehensive medical insurance plan should be available to all people in the United States. Secondly, I think considerable study should be given as to what type of insurance should be afforded or offered to the people in the United States. For those in the low income group, I do not believe that Federal insurance is desirable for the reason it would entail another political football with a magnitude of funds that is staggering. They have already estimated this program will amount to nearly a billion dollars. There was a time in the history of the United States, within the memory of some of us, when the first billion dollar government was established. That was in 1910 or '11 and everybody thought it was terrible. It is a tremendous sum of money. And we know if we have a Federalized scheme of health insurance, it will not be what is desired.

IS STATE PLAN FEASIBLE?

"We might break it down further and ask whether a state plan is desirable. I question that again, because I think the centralization in the state form of insurance is too great for the proper form of management. I think it comes back to what we have contended, that the care of those not able to pay go back to local communities where you are conversant with the situation and can evolve a scheme applicable to that particular locality. I think the medical profession has declared itself as being perfectly willing to cooperate in those things which I have described as intangible services which are the most valuable part of the medical profession.

LOST-TIME COMPENSATION

"Now, the last recommendation made was for compensation for those who through illness have had loss of wages. Again, theoretically, we believe in that but again I say we should go very, very slowly. We cannot be expected to change from individual action to group action and do it very quickly. I believe if we first start with the group of people the profession is willing to serve with a prepaid cost plan, we should leave out the question of compensation. You can't throw these things at the American public all in one lump. We must digest first the social problems in the first three or four, and leave the last one until we can absorb it and accommodate our social action to it.

"I think it can be definitely and honestly stated that all of these investigations have been purely social. They have not been comprehensive in the so-called economic phases and I don't think that the public of the United States will improve their standards of health until those are incorporated into a consideration of our health problems. I don't think there is a doctor here who is so egotistical as to believe his services of peddling pills and operating on patients is as important as the elevation of the economic standards of living which we know in medical knowledge today are more important in the public health picture than our services. I think we must definitely and always stress that point, and the point that if the United States Government is wanting us to do our best job, it must give us the tools with which to perform that service."

Plans of State Association To Solve Problems Are Analyzed

In introducing Dr. Parke G. Smith, Cincinnati, President-Elect of the State Association, Dr. Houser explained that shortly after the National Health Conference, The Council of the Association authorized President Hein to appoint a Special Coordinating Committee to analyze the proposals of the National Health Conference and to recommend steps which the medical profession of Ohio can take in attempts to solve some of the medical, economic and social problems involved in the whole picture of medical care for all classes. Dr. Smith was named by Dr. Hein as chairman of that committee, Dr. Houser stated, and he had been requested to discuss the work of that committee under the general subject of "What the Ohio State Medical Association Is Doing to Meet the Emergency".

Dr. Smith prefaced his remarks by naming the members of the Special Coordinating Committee of which he is chairman: Dr. L. Howard Schriver, Cincinnati; Dr. D. W. Hogue, Springfield; Dr. E. J. McCormick, Toledo; Dr. Fred Douglass, Toledo; Dr. William M. Skipp, Youngstown; and Dr. H. V. Paryzek, Cleveland. Also, he outlined briefly the general purpose of the committee, stating that it was three-fold, namely: To consider the national emergency with respect to the practice of medicine; to study factual data influencing the health of the public; and to formulate ways and means of meeting proved needs and informing the public about the views and policies of the medical profession.

OBJECTIVES OF SPECIAL COMMITTEE

"In other words," he said, "it was the obligation of this committee to assemble known facts as to the methods by which medical services are being distributed; to determine in what way those particular methods are either interfering with or promoting a better practice of medicine; to place itself in a strategic position where it might, if it is deemed advisable, recommend for consideration of the State Association a plan or plans which might provide a more adequate and more available medical service to particular groups of our population in which we are at this time especially interested. It was also thought that it was within the province of this committee to consider the advisability of carrying on a campaign of public education."

PUBLIC EDUCATION CAMPAIGN

Explaining that the committee divided itself into sub-committees to expedite action, Dr. Smith continued:

"The first sub-committee appointed was to consider the matter of public education, to make an

analysis of the various methods of educating the public.

"The second sub-committee appointed was a committee to make a complete analysis of all of the plans that are in existence and to assemble that information in such a way that if it was decided to carry on a campaign of public education, this information would be immediately available to that particular committee.

"Now, if it is decided to carry on a campaign of public education and if it is decided to present a plan or plans of procedure to the State Association, it would be necessary that certain other factual data be assembled. We, therefore, appointed a sub-committee to assemble material regarding the basic economic principles underlying the incidence of disease, such as food, housing, environment, etc., and data comparing mortality and morbidity of the United States with countries where systems of state and socialized medicine are in operation, as well as information pertaining to the influences of medical services in the incidence of morbidity and mortality.

"As hospitalization also is a part of this problem, we appointed a sub-committee to assemble information on and analyze the present availability of hospital insurance coverage. That means not only insurance coverage as is given by group hospitalization plans in various parts of the state but hospitalization as offered by private insurance companies. In other words, to attempt to arrive at a point where we can determine the actual availability of that type of coverage.

"The last sub-committee is one to assemble data as to the probable cost of a program or programs of socialized medicine.

"In other words, we are attempting through this committee to offer a constructive program to the State Association; if instructed by the State Association, to be in position to sell that idea and in order to sell that idea, to assemble the necessary arguments to fortify our position.

PLANS OF SEVERAL COMMITTEES

"I might state that at the present time in various communities of the state—Toledo, Cleveland, Cincinnati, and certain other communities—there is a very, definite movement toward an attempt at the solution of the problem of providing a more adequate and more available medical care to that particular group of our population where the need is definitely indicated. We are not considering the question of those people who are completely indigent. That is a matter which is in the hands of our Committee on Poor Relief.

"At the present time, without obligating the committee, we are thinking of the group with annual incomes at $1,800 or less. Whether that figure is correct or not is something that will have to be determined but at the present time that is the particular group to which we are devoting our attention.

"We believe that through the experiences of these various communities throughout the state, our committee will be able to come before the State Association with a definite constructive program to make medical care more available and more adequate for that group of our population which is at the present time attempting to pay their doctor bills; that group which does not wish to be pauperized but because of the present setup probably are asked to bear a greater burden of expense than they can afford.

MUST OBSERVE BASIC PRINCIPLES

"Of course, in all of our deliberations there are certain principles that are absolutely necessary for us to follow and certain principles that must be included in all plans, namely: The free and absolute choice of physician; secondly, the remuneration for medical services entirely upon the basis of the extent of services rendered; and, third, absolute control of the dispensing of medical services by the medical profession.

"We are in a most fortunate position in that we have a cooperative, wide-awake, workable organization in Ohio and one that I believe is going to make a very definite contribution toward solutions of those problems which all of us have appreciated for a great number of years."

Policy and Action of A.M.A. Discussed by Dr. Sensenich

Dr. Houser then introduced Dr. R. L. Sensenich, South Bend, Indiana, member of the Board of Trustees of the American Medical Association. In presenting Dr. Sensenich, Dr. Houser said:

"We are fortunate today in having with us a Trustee of the American Medical Association and when I say we have a man who is a Trustee of the American Medical Association, we know that he must know something about medicine and must have worked in the cause for some time or he wouldn't be a Trustee of the American Medical Association. So, we are happy to have him with us to tell us what the American Medical Association is doing about this matter. If you will recall, there was a meeting on September 16 of the House of Delegates of the A.M.A.—rather an unusual thing to call an extra session of the House of Delegates. So, I am going to present at this time Dr. Sensenich who will address us on the subject: "Plans of the American Medical Association and Report on Special Session, House of Delegates, A.M.A."

Dr. Sensenich's remarks, in part, were as follows:

"There are certain abstractions which always enter into this problem. The thing that constantly comes up is in reference to the public, what the public wishes, and what the state wishes, and whose responsibility is it, the responsibility of the profession or the state, and what shall be done about it?

"First of all, the state is a rather mythical structure. For some years I have tried to learn who the state was and what actuated his movements and what might be done to satisfy him in his demands if health was a matter of responsibility of the state, and was always forced back on the conclusion that while the state is represented by some individuals elected to certain positions, after all, that individual acts as an individual and he acts very much as he or a limited group of individuals think he should act.

"Now, the reason I stress that point here is that this problem naturally resolves itself into two broad divisions, that which apparently has some national interest and some national uni-

formity as desirable and that which applies down to the local community and is purely a local problem.

NO COMMON SOLUTION

"There is a vast difference between these two situations for the reason that the situation is not the same, I dare say, in any two states in the United States and certainly it is not the same in any two counties. There are minor variations, certain general applications but still so widely different as the group enlarges in the great number of counties in the United States or states involved, that no common solution will apply to all these conditions.

"To make clear what I mean, there are certain portions of certain states in which practically not a dollar has been spent for medical care for a period of years which has not come from the Federal Government. I speak especially of the northern half of North Dakota, certain areas of Kansas, and others. It is not necessary to go into all of these groups. But, after all, you have a problem there in which the individual does nothing to care for himself because he has been unable to do so.

"Obviously, any program which will apply to that situation must be one predicated on the basis that someone else is going to furnish the money and that money must come from the outside. That is exactly what happens.

CONDITIONS VARY

"Now, almost fifty per cent of the population in the United States live in a relatively small number of states, of which Ohio is one. It might be possible readily to plan some sort of structure which would apply to this half of the population at least. But, again, I think you will admit there are areas of Ohio which present an entirely different problem, especially rural, sparsely-settled areas and areas which have no industrial problem of any kind, in which their problem of medical care is vastly different from the industrial centers of the northern part of the state. In one area you have pressure for a particular kind of relief and in another area that problem is not at all evident—the whole discussion of medical care is more of a social discussion and general desire to have something which will make medical service easier to obtain and perhaps at less expense. I speak especially of the rural areas, some of the rural areas that throughout most of the depression have not had any acute financial problem. Their medical care has been no different than for many years past and doctors in those areas made very good collections. And yet in those areas we have organizations which clamor for some sort of prepayment medical care One group I know of seems to be unwilling to accept anything as an improvement or that would satisfy them except something copied after the Ross-Loos proposition in California in which the individual pays a limited amount on a prepayment basis and it is presumed everything he wants is included. That presents all the objectionable features which are in the prepayment medical insurance we have had in foreign countries.

DANGERS IN CO-OPERATIVE PROGRAMS

"On the other hand, there are some areas that are taken care of more or less by co-operatives. I know in Ohio you have many co-operatives. Your problem in co-operatives is no different from other co-operative methods of obtaining funds for a particular purpose. There is nothing so objectionable about the collective idea provided the money is set up on the insurance basis and provided, as pointed out by Dr. Smith, the money is paid on the basis of the service rendered by the physician and, secondly, that this collective group of individuals do not use the power coming from a united front to force the medical profession to accept less than a reasonable charge for that service which they perform. It is no different than a mutual insurance problem, so far as that is concerned, but the difficulty has been most often when you get a group together of that kind, they are insistent upon demanding of the medical profession an unlimited amount of medical service at a fixed price which puts the physician in the position of carrying the insurance. In other words, it puts him in the position of complying with anything they demand but he has no control over the payments.

FIND THEMSELVES IN TROUBLE

"Now, without going into the various programs—and there are myriads—I don't believe there is any plan of distribution of medical service that anybody has conceived that isn't in operation some place in the United States. Sometimes it is by the medical societies themselves. We have medical societies in the Northwest that for a period of years have been selling medical service on a prepaid basis and actually going out and soliciting the business! Unethical? Yes —and most unhappy, too. The American Medical Association in a good many instances has been appealed to to try to get them out of their difficulties, difficulties which we cautioned them against six, seven, eight years ago. The machinery was set up to oppose commercial organizations offering that type of service. The unhappy end-result is that some of these medical societies are being sued for failure to carry out contracts made on this solicitation basis.

"You see, the reason we emphasize that is that, after all, you can get yourselves into a lot of trouble when you start out in the commercialization of medical practice in competition with some commercial group or otherwise because, after all, the situation rapidly changes.

ACTION AT SPECIAL SESSION

"Now, we will leave that explanation and go on to the matter of what immediately confronts you. You have read the results of the recent session of the House of Delegates of the American Medical Association. You will find that certain specific recommendations were made and that the report of the National Health Conference was taken up item by item, each recommendation being turned over to a reference committee to be given particular study These reference committees held hearings and every individual in the house of delegates (and there were many who had ideas and plans and certain proposals) was given an opportunity to present what he had in mind. After having heard all of this evidence, these committees made an effort to consolidate and give sufficient study so that they could make definite recommendations that apply in general to the whole group of proposals made and those recommendations are specifically stated.

"If you take the recommendation, just briefly, under number one on the expansion of public health services, the committee first of all recommends the establishment of a Federal Depart-

ment of Health. The general principles outlined by the Technical Committee for the expansion of Public Health and Maternal and Child Health Services were approved, and the American Medical Association definitely pledged to cooperate in developing efficient and economical ways and means of putting into effect this recommendation. The House of Delegates said, however, that any expenditure made for the expansion of public health and maternal and child health services should not include the treatment of disease except in so far as this cannot be successfully accomplished through the private practitioner.

UP TO LOCAL MEDICAL SOCIETIES

"Now, who is to determine that? The American Medical Association can't do it. The State Association can come a little closer to doing it. But, after all, in the main, the local county medical society has to meet that problem. In other words, if your local county medical society is not able to meet this through your private practitioner in your own community, then you have no defense. You can say that this treatment should be done by the private practitioners but if you haven't the private practitioner there, the facilities there by which he can do that work, then what is the argument? If you admit it is in principle what should be done, and I think you couldn't successfully oppose that, then you have admitted some other sort of machinery has to be set up.

"Under the second recommendation on expansion of hospital facilities, the expansion of general hospital facilities where need exists was approved. All right, not to waste much time on it, who determines where the need exists? The use of existing hospital facilities was stressed.

NEED MUST BE PROVED

"A large proportion of the hospital beds in the United States are unoccupied at present. They run from 60 to 75 per cent occupancy. Now, it ill behooves the medical profession in a community where you have existing facilities, to favor the government coming in and setting up a new hospital in competition with hospitals that already are having great difficulty getting along. Few hospitals can operate successfully from a financial standpoint with their occupancy under 75 per cent and if any number of your group or a sufficient number of your group, because it looks like easy money, are so disloyal as to invite the government to go out and create new hospitals in order that that individual may have something to his advantage, then the medical profession is not meeting its loyalty to its own profession as a whole and, after all, is throwing something which is disturbing and disruptive into the local problem of medical care. Again that is up to the local men.

"Under recommendation three, the House of Delegates advocated recognition of the principle that the complete medical care of the indigent is a responsibility of the community, the medical and allied professions, and that such care should be organized by local government units and supported by tax funds.

BECOMES COMPLEX PROBLEM

"When you go out to find out who the local responsible parties are, you find the state dissolves itself into the next higher unit that has money. The individual who is immediately in control of the situation, it isn't he. No, he hasn't any money. It is the individual above. The other individual hasn't any and, after all, it resolves itself into the proposition of who gets to the Federal grab bag first. There is no necessity for going into the various elements there.

"You see, the problem becomes a complex one. How far shall the Government step in and dominate the picture because wherever the money comes from, there is the control. Don't forget that. There isn't any way you can get around it.

"Now, an additional recommendation here: 'In the face of the vanishing support of philanthropy, the medical profession as a whole will welcome the appropriation of funds to provide medical care for the medically needy, providing first, that the public welfare administrative procedures are simplified and coordinated; and, second, that the provision of medical services is arranged by responsible local public officials in cooperation with the local medical profession and its allied groups.' You see it is not a national problem; it is a local problem to coordinate and control your local things.

"Now, under number four, under the general program of medical care (and that is one that was discussed this morning), the A.M.A. approved the principle of hospital service insurance as a community project. Experience in the operation of hospital service insurance or group hospitalization plans has demonstrated that these plans should confine themselves to provision of hospital facilities and should not include any type of medical care.

VIEWS ON HOSPITAL INSURANCE

"Again, that is a local problem. If the insurance is handled properly and safeguarded, it can be very helpful. I don't know that they are all sound. There is a tendency in any mutual group as soon as they have a few dollars ahead to increase the benefits to a point where they are not. There are no actuarial standards and an epidemic might wipe out the funds and destroy that project. But, nevertheless, properly handled, such programs relieve a certain quite sizeable burden from the shoulders of low income individuals in unpredictable illness and simplifies the question of medical care.

"Your problem is both natural and local to this extent: In your local society where your mutual group springs up, to have a hand in the development and direction of your group hospitalization in such a manner that that kind of plan will not grow out of it. Along with that I might say that the American Medical Association has its side also and that is to deal with the larger group, the American Hospital Association made up of hospitals that are indebted to the medical profession throughout all their history for staffs, maintenance of standards, the great volume of charity work done without charge to anybody.

"Next, the House of Delegates recognized the soundness of the principles of workmen's compensation laws and recommended the expansion of such legislation to provide for meeting the costs of illness sustained as a result of employment in industry. It expressed a conviction that voluntary indemnity insurance may assist many income groups to finance their sickness costs without subsidy.

WHAT ABOUT MEDICAL INSURANCE?

"Again, there is something which is capable of very good or very harmful effects. We were

talking a moment ago about the matter of some kind of insurance to provide the proper kind of medical care for the individual who is of low income and with that in mind, we have to deal again with a local problem as well as a national one. Your local group must see that your insurance does not provide unlimited medical service on one hand or, on the other hand, does not set up again the machinery which may very readily be turned over into some plan which gives complete medical care. Those are local problems which the local medical groups must protect themselves on.

"Now, what about the American Medical Association on this? We have stressed and emphasized the local side. The local group becomes something of a collective bargaining group, something that hasn't been in the medical structure. Local societies have been purely scientific. They haven't had any of these problems to deal with except in recent years.

"One of the reasons for the A.M.A. survey was not only to get information but to get the local societies to thinking about their problems and prepare plans by which those problems could be met in their own communities. The American Medical Association has made every effort to get this material together so that some analysis may be made of it to determine whether, in addition, certain principles which will have national application for the guidance of everybody can be defined. In so far as those principles can be developed, the American Medical Association makes an effort to do so but can't legislate a particular program in a particular community against another community whose problems are entirely different.

STANDARDS MUST BE MAINTAINED

"The American Medical Association is just a federation of state associations and that is well in that the state association has a wide range of movement. We have no autocratic power. There is nothing that the American Medical Association can do to a local state society so long as they stay within ethics. But, beyond that, is the fact that some of these states unfortunately when they completed that federation, didn't think there was anything else necessary to be done about it and they haven't developed as they should. But, that has improved tremendously and the very thing that has improved it is the Ohio State Medical Association, the Indiana State Association, the American Medical Association and others. It brings the disinterested man to realize, 'I have now got to be interested in this because I realize it applies to me. If medicine is going to do anything to retain medical service to the best interest of the public, it must be done by some sort of co-operation.'

"With that comes the thing we have been working for, for six or seven years, strengthening local county associations not only in the matter we have discussed but the matter of educational standards. One of the steps recently taken is the matter of postgraduate work. We have to maintain standards. One of the speakers at the national health conference said medical service was of medieval character. Well, I don't think it is medieval in character but I think all of us will admit standards aren't the same all over. So, the medical profession must stimulate its own groups to give the best possible service. Not only has the financial side been stressed but proponents of the socialization of medicine claim that standards would be higher and that under those conditions, better men would go into communities, they would be better supported and the public would receive better care.

HOW A. M. A. CAN HELP

"Finally, what can the American Medical Association do to help you? We don't go into a state without invitation. We want every state to feel that after all it is an autonomous unit, it is one which goes ahead with its own problems, meets its own problems as long as they are consistent with general principles outlined. But, in turn, we will go into that state and do anything we can within reason to assist them by advice, to assist them by the use of our facilities.

As The Journal went to press, information was received that the special committee of practicing physicians authorized at the recent special session of the House of Delegates of the American Medical Association will confer in Washington, D. C., October 31 with the Interdepartmental Committee to Coordinate Health and Welfare Activities and the Technical Committee on Medical Care, for the purpose of discussing the proposed National Health Program.

"On the other hand, we cannot step down into your local community and say to you that this is the program which you must set up. You wouldn't want us to and, conversely, we cannot take your idea, which may be thoroughly good in your community and you may think it is fine, and say to all the rest of the counties and all the rest of the states in the United States: 'You have to accept this because it is good'; because it may be bad so far as their particular situation is concerned.

"We are flooded constantly, and we are very happy that we are, with ideas, ideas of all kinds. We are glad to have constructive criticism.

"I am very happy to see this meeting called for the purpose for which it is called and your plans certainly are very excellent. You are approaching your problem from the most desirable angle and that is the angle of study. It is surprising how much clearer the situation becomes when you remove the abstractions and apply it right down to your local community. One of our problems in America is we are idealists. We are given to follow the standard-bearer with the high-sounding purpose and that purpose may be full of abstractions nobody can clearly define or that everybody defines differently. But, when you apply it down to your own community and say, 'How many of this low income group do we have? What is it going to cost to give the kind of ser-

vice they ought to have? Are they getting that service now? Are they paying too much for it or not enough for it? And, lastly, which is most important, do they want it?'

"The trouble with many of these plans is they come from the top down and not from the bottom up. After all, we have to consider the situation whether the individual wants this service or not because every type of voluntary service to low-income groups has sooner or later led to compulsory insurance under governmental control—and don't forget that! The reason being the very group whose problems we want to solve is the group that will not voluntarily insure themselves and when they do not voluntarily insure themselves, somebody raises the point, 'If you say it is a good thing and these people ought to have it and don't buy it, we'll see that they must buy it,' and that always has a great appeal to the taxpayers and others who say, 'After all, the person who doesn't take care of his own interests becomes a burden and when times get bad, he goes on relief and the taxpayer who has provided for himself and has set up some little property is forced to pay.' So, after all, those are things which should come into your study and your making the proper kind of approach.

"I am very happy to have been here and again I want to say we are proud of the Ohio State Medical Association and we are glad to help you any way we can."

COMMENTS BY DISCUSSANTS

A general discussion was called for by Dr. Houser at the conclusion of Dr. Sensenich's address. Those taking part in the discussion and their comments, in part, follow:

Dr. T. H. Sutherland, Marion—"When we get fundamentally down to the economics, we know the road of resistance has a lot to do with disease. When we get to the lower income class, we find them deficient in food and also find them oversupplied with children. I believe it is up to the medical profession to make an offensive on birth control and sterilization of our defectives."

Dr. J. T. Murphy, Toledo—"Shortly after the conference in Washington, the United States News gave almost an entire edition to opinions of people in that conference, as to what they thought of this plan and editorial questions were answered and some wrote a whole editorial on the questions. I think it would be fine if the Association could reprint that because it gives you an idea of what is in the minds of the men fostering this. It is published in Washington."

Dr. Chas. J. Wehr, Bellevue—"My excuse for speaking is that I have given a good deal of thought on this subject from a broader point of view, that is a revision not only of our medical proceedings but economic situation in general. I think if we had a more just distribution of income, it would to a very large extent solve the problem. Now, there are certain things that we should demand as an organization, as a part of society. For instance, we ought to have control of everything that has to do with medical practice and sanitation, and if we do, we should have a representative in the government to whom our government must apply for advice."

Dr. Carl R. Steinke, Akron—"I had the privilege yesterday of reading the resolutions adopted by the American Hospital Association and from that I got the impression the hospitals were going to stay with the profession and were not in favor of hiring doctors to take care of cases. They feel the hospitals can work with the medical men rather than take over the medical service. There are two things I have been thinking about since Dr. Hein appointed these committees to make surveys. One is the delay in people seeking medical aid. It seems the government would like to legislate the people into forcing them to seek medical aid. It can't be done. A survey as to the delay in coming to physicians even when they can afford it would be of value to the government in showing they cannot legislate people into going to a physician or seeking medical service. Another thing, I have noticed since the hospital insurance plan has been put into effect in Akron. These people are not satisfied to keep the cost down within their insurance rate. They have taken the ward rate or two-bed rate but when they go to the hospital, they take higher service in the form of a private room. I think it would be interesting to have a survey to see how many of those sold are satisfied to keep their cost of medical care down to the amount in their policy. My experience has been that more and more are not staying within the insurance amount but are increasing their cost by taking private-room service."

Dr. Russel G. Means, Columbus—"I have been out this last week or two with Dr. I. B. Harris and our committee interviewing candidates. There are safe ones in both parties and very unsafe ones in both parties. I think you have to know your individuals from past records around home. You have to know what these men stand for before saying they are going to be safe. And, right along that line, it is up to the medical profession to awaken those who don't belong to our organization to forget party lines and to vote for qualified candidates. I run across members of the medical profession who say, 'It needs me more than I need the county society.' I don't know about that. He is a dangerous man in our own society. Maybe we ought to start to cut throats inside."

Dr. Wm. A. French, Jr., Ironton—"The American Medical Association has been maligned by certain people as being an autocracy and excluding certain groups. I know it has been said by colored physicians and even though I have been a physician but a limited number of years. I have had the pleasure of sitting in on similar groups where I was the only colored individual, even though it wasn't of a medical character. I was pleased to hear one of the speakers say that the American Medical Association was a federation of associations. Further, they said that there was a good deal of local option and that is what the American Medical Association stood for, and my presence here today is illuminating to me and it should be to you people assembled, that being the only colored physician in my community, those individuals that sent me here did not feel they were so autocratic that they didn't want a colored man from their group and I think that would be a slap in the face to all those that feel the American Medical Association is autocratic. I believe that if there is local option, then it will be up to the individual communities to determine who will be in the society and I believe if all groups work toward the betterment of the health of the whole community, then all state associations should be proud of the Ohio State Association and I am certainly proud of it and I daresay that my experience is incalculable."

Dr. D. J. Slosser, Defiance—"In my contact with nominees and incumbents in office as well as talking with physicians on this active phase of our Association, I have come to this conclusion: I feel that our Education Committee has struck the right chord in the matter of education because we as physicians are not instructed as to the answering of questions constructively so that the public might be influenced. I feel that there should be articles constructive in nature published through some central source so that the newspapers can publish them and the public can be instructed in the proper way and that should be done immediately. I can say in my experience, with only one or two exceptions with incumbents in office, those nominees favor the policies of the medical profession and you might be surprised what a sentiment there is in the state of Ohio. There will be constantly increasing sentiment by just such action as we have today."

Dr. W. C. Cory, Chardon—"I suppose I represent one of the few men in the room, in county and state, who is a health commissioner, private practitioner, and also attempts to run a small hospital. Insurance men have a slogan that insurance is never bought; it is always sold. Whether we like it or not, those of you who have been reviewing your books must admit that we all are carrying the insurance for sickness today privately that some of these things are trying to do collectively. I don't believe there is a man in the room who has been practicing fifteen or twenty years who couldn't retire very nicely if he could collect that balance due. Now, we have said our interest is public health and I'd like to know if you are well acquainted with your public health department in the state and in your county, and if you are satisfied with the support you as practitioners have given the public health department. Are you satisfied to have in your public health department over here or any place a man whose services can be bought for the year for $2,400? PWA common labor is worth 80 cents an hour. It doesn't put the man who is deciding the public health issue very high. In view of salaries paid for state consultants, how can any health director build up a satisfactory staff with the limitation of salaries that are now imposed? I simply ask the question. I can't answer it."

At this point, at the request of Dr. Houser, Executive Secretary Nelson introduced Dr. H. T.

Phillips, Athens, Republican candidate for the State Senate from the Ninth-Fourteenth Districts; Dr. H. V. Dutrow, Dayton, Republican candidate for the State Senate from the Third District, and Dr. Floyd M. Elliott, Ada, a member of the House of Representatives of the present General Assembly. Each was given an ovation, after which the conference recessed for luncheon.

Information on Candidates Is Presented To Conference

The afternoon session opened with a review by Executive Secretary Nelson of the information assembled on some of the candidates. Mr. Nelson also explained how the Sub-Committee on Legislation had divided the state into zones for the purpose of making each member of the committee responsible for a certain number of counties and for supervising the legislative activities of the local legislative committeemen in the counties in his zone. Also he reviewed the action of The Council on the previous evening in authorizing the printing and distribution of information pamphlets regarding candidates, through the legislative committeeman or legislative committee of each county medical society. He stated that The Council also had authorized the President to mail a letter to each member of the Association, urging an active interest in political and legislative affairs and informing the member that the legislative committeeman or secretary of his county medical society had accurate information regarding candidates available. Legislative committeemen present were urged to take the proper steps, upon receipt of the information pamphlets from the Headquarters Office, to get the information into the hands of all members of their respective county societies.

"The splendid work which has been done by the Sub-Committee on Legislation and local legislative committeemen will be of no value unless the information pamphlets are distributed to members in each county," Mr. Nelson said. "The information has been accumulated for the use of the members. Don't file it in the archives of your society. Get it into circulation. Put it to work. Get your members interested and get them to actively support candidates who are qualified."

Plan of Pre-Election Action Is Outlined by Dr. Sawyer

Dr. Houser then introduced Dr. Carl W. Sawyer, Marion, a member of the Sub-Committee on Legislation, who spoke on the subject, "Plans for the Fall Political Campaign and Session of the Ninety-Third Ohio General Assembly."

Dr. Sawyer reviewed the situation confronting the medical profession and why it has become necessary for the profession to take a direct interest in public affairs and engage in political activities, not on a partisan basis but from the standpoint that the medical profession must protect the public from programs and schemes which, if enacted into law, would be detrimental to public health and result in inferior medical care. Dr. Sawyer pointed out that in addition to the definite problem of attempts to socialize medicine, the medical profession is confronted with two other serious problems which must be solved, namely: Indifference in the ranks of the profession and lack of understanding of the medical problem by the general public. All three must be attacked at this time, Dr. Sawyer stated, and he suggested various general methods of approach.

Referring to meetings held by the Sub-Committee on Legislation and the program of attack drafted by that committee, Dr. Sawyer said:

"First of all let me apprise you of the fact that the policy of the Ohio State Medical Association is made by the House of Delegates and the Council. We, the members of the legislative group, are in no way responsible for the making of any policy of the organization nor should we promulgate any ideas under the name of the association unless they have been passed by one of the above duly constituted groups. Neither should individual physicians, when acting as members of the legislative committee, or officers of any of the component societies put forward generally any of their own ideas that are divergent or not in accord with the policy worked out by the central organizations. In the event that any person holding an official position cannot find himself sufficiently in accord with the policy of the Ohio State Medical Association, he should withhold his personal activities and opinions so long as he represents the organization and, in the event that he is too divergent from the general policy set up, my personal suggestion would be that he resign from his official position. These statements in no way have anything to do with your personal ideas or activities in your personal lives. They simply mean that these personal ideas and activities should not be promulgated under the guise of an official position held in the Ohio State Medical Association.

ACTIVITIES SHOULD BE NON-POLITICAL

"Your committee wishes it definitely understood that all activities are to be non-political. By this is meant that the usual political measures to obtain ends are not to be indulged in. Frankness, straightforwardness, factual statements and activities only are to be carried on. Neither are political parties to be taken into consideration in the selection of persons with whom we are to work. Only in dire necessity, when complete obstruction, opposition and unwillingness to recognize the medical profession is met, should effort be made to defeat a candidate or to chastise an officeholder and then, personally, I should say that the necessary measures are to be carried out in such a way that defeat of the individual would be certain. It is the idea of your committee to win the assistance, allegiance and interest of all per-

sons running for office and of all persons after they have once attained an office.

SHOULD SERVE AS ADVISERS

"Secondly, your committee wishes it to be definitely understood, that all our activities are to be regulated and aimed that the office seeker or the office holder will look upon us as an advisory committee to whom he can turn for correct advice and assistance in meeting the many medical problems which all legislative office holders will be called upon to meet within the coming year. We feel that a complete understanding of the needs, the policies, the principles and the activities of the medical profession by the politicians and office holders will do more to correctly handle the situation that is developing than opposition, obstructionists' tactics, threats, or indirect and incorrect methods. In fact it is the desire of the legislative committee of the Ohio State Medical Association that every effort be made by not only the legislative committeemen and the officers of the component county medical societies, but by every doctor of medicine in the state of Ohio, to place the medical profession in an advisory capacity and to create in the minds of all people the fact that the doctor of medicine is willing to correctly suggest measures and assist in their carrying out, that will be for the welfare and the health of the populace in general.

QUALIFICATIONS OF CANDIDATES

"For the succeeding month, much of your effort will be devoted to contacting the nominees for office. What the medical profession desires is that office holders shall be men of integrity,—men whose reputation in their local community is such that they can be relied upon to be open-minded and amenable to reason. Medicine has no intention whatever of doing anything of a disturbing nature. It is simply seeking to assist in the maintaining of the general welfare and health of the entire population, and to maintain as many of the principles of present day medicine and medical conduct, as are necessary to give the best medical care to all members of our citizenry. Medicine likewise asks for sincerity in its candidates. Vacillating men, men who, for expediency and for their own welfare solely, subjugate themselves completely to the wills and desires of others, men who are looking for popularity solely cannot be tolerated by the medical groups. Medicine also expects independence in its candidates and office holders. We desire men who have the independence to seek proper advice and then act upon it, rather than men who can be brow-beaten or threatened or scared into submissive voting. Remember that if we gain the approval of the officeholder by measures of this type, others can do so likewise, and consequently no one can feel secure.

"Lastly, medicine desires men who are willing to seek and listen to and think over advice given to them. We want men who will realize that those persons trained along a certain line are better able to advise and suggest than those who have had no training and who are swayed by emotional factors entirely. We want men who will recognize that the medical profession knows what it is doing, understand what it wants,—men who will assist in securing what is necessary for the proper welfare and medical care of the entire population.

"You probably are saying that medicine wants the impossible. This is hardly true because there are many men and women in every community who can fill all the above requirements and certainly some of them must be running for office at the present time.

LOCAL WORK MOST EFFECTIVE

"Your committee believes that the most effective and most constructive work with the office holders can be accomplished by the local legislative committeemen in their local districts. Propaganda has reached such a high point in our present day social system that it really serves but a small and ineffectual purpose. Legislators, like all other individuals nowadays, are deluged with propaganda from numerous organizations of all types. It is only natural that the office holder pays small attention to all of the things that are brought and sent to him. The idea of the office holder is that men holding official positions in any organization are there for the purpose of looking after the interests of that organization; that they are paid to do their job; and that naturally they will play up their side of the question under discussion as completely as possible to their own advantage.

"The officeholders likewise know that they probably never again will see these individuals or contact them. Consequently, they in most instances pay small attention to any activity or propaganda unless the mass of presentation is so great and represents such a volume of votes or threatens them with such dire consequence that should the officeholder not heed the requests they will pay a personal penalty for their neglect. Legislative bodies, consisting of individuals proceeding under this condition, cannot be either correct in their decisions or beneficial to their constituents.

EVERY MEMBER MUST HELP

"For this reason your committee wishes that every legislative committeeman, every officer of every component society and, in fact, every member of every component medical society, make it his business to contact the candidates for and members of both the Federal and state legislative bodies who live in his community. That they do this personally; that they do it in a neighborly fashion; that they do it just as they talk over any subject with any person. It is thought that this contact at home, by the neighbors, friends, patrons, and dependents of the members of these legislative bodies will help them to more clearly fulfill their correct duty as officeholders representing their constituents, also that in this way medicine will gain the greatest assistance that it ever had. To refuse to follow the advice of a stranger is not difficult, but to refuse to follow the advice, and suggestion given sincerely, honestly, and with the best of purposes in mind to you by your friends, neighbors, and your everyday associates is a difficult, unpleasant and hazardous thing to do.

"Do not ask candidates for pledges of support, merely ask their opinion and attitude on medical and public health questions. Remember no one likes being pinned down. Not only should you begin at once with the candidates to win their approval and trust, but you should do it in such a way that in the event that they are elected they will continue this approval and trust throughout the period that they remain in office, and that those who do not succeed

in becoming elected, will still respect you personally and likewise the medical profession and the Ohio State Medical Association.

GET OTHERS TO HELP

"Likewise begin at once to make contacts throughout the community in general. The members of the component medical societies should take it upon themselves to make every effort they possibly can to educate the general public relative to the needs and desires and policies of medicine in its effort to help and benefit the public generally. In some places it has been found expedient to organize public health committees of the allied professions consisting of retail druggists, nurses, dental and local medical groups.

JOB IS NOT EASY ONE

"To be a legislative committeeman in the future one must work hard. It is a real man's job. Personally I would suggest that every component medical society at its next election place in office a president and a secretary who can be relied upon to carry out the duties of their office so far as the relationship of the medical society to the general public is concerned. And that these men or the bodies that put into office the legislative committeeman or the legislative committees of the different county medical societies should see that men are placed on legislative matters who are reliable, diplomatic, broad-minded; who thoroughly understand medical principles; who are willing to work; who are respected in their communities, and highly imbued with the policies of the medical profession. The succeeding years are ones fraught with great danger to the medical profession, and the success or failure of the medical profession lies to a very great extent in the activities of the individual legislative committeeman in the individual county societies. Never was there a time when it is so necessary that our state and national legislators be correctly informed. Never was there a time when they are as willing to be informed as they are right now. So be sure to see that the right type man is placed in the legislative committee positions.

"Spread the word as rapidly as possible that the medical profession is seeking to help the general public good and not its own selfish interest, that you, the legislative committeeman of your county, represent the state and national medical organizations in your community and that you stand ready and willing at all times to advise and assist in the securing of better and more medical care to the populace in general. Submerge for the time at least your personal feelings in these matters and stand for the good of all."

At the conclusion of Dr. Sawyer's talk, additional suggestions were made by Dr. Sutherland, Marion; Dr. Means, Columbus; Dr. Dutrow, Dayton; and Executive Secretary Nelson. The conference then adjourned and members of the Sub-Committee on Legislation held group conferences with officers and committeemen of county societies in their respective zones.

Those registering at the conference were:

Adams County—A. R. Carrigan, L. H. Leonard, Manchester; S. J. Ellison, O. T. Sproull, West Union. **Allen County**—Ezra Burnett, Delphos; Burt Hibbard, Lima. **Ashland County**—Herman M. Gunn, M. D. Shilling, Ashland; Elmer Jackson, Perrysville. **Ashtabula County**—A. A. DeCato, Ashtabula; Charles H. Edel, Kingsville. **Athens County**—H. T. Phillips, Athens. **Auglaize County**—Guy Noble, St. Marys; C. C. Berlin, E. F. Heffner, Roy C. Hunter, Wapakoneta. **Belmont County**—C. W. Kirkland, Bellaire. **Butler County**—H. M. Lowell, Hamilton; D. M. Blizzard, Mildred White Gardiner, Middletown.

Champaign County—D. C. Houser, Urbana. **Clark County**—D. W. Hogue, Springfield. **Clermont County**—J. M. Coleman, Loveland. **Columbiana County**—J. W. Schoolnic, East Liverpool. **Crawford County**—W. G. Carlisle, C. H. King, Bucyrus; O. R. Kackley, Galion. **Cuyahoga County**—Edgar P. McNamee, Ralph M. Watkins, Mr. H. Van Y. Caldwell, Cleveland; H. C. King, Lakewood. **Darke County**—W. D. Bishop, C. J. Mills, Greenville. **Defiance County**—D. J. Slosser, Defiance. **Delaware County**—A. R. Callander, Delaware. **Erie County**—Henry L. Sowash, Sandusky.

Fairfield County—C. G. Axline, Carl W. Brown, Lancaster; C. P. Swett, Sugar Grove. **Fayette County**—James F. Wilson, Washington C. H. **Franklin County**—James A. Beer, Leslie L. Bigelow, Jonathan Forman, I. B. Harris, Mr. S. R. Mauck, Sidney McCurdy, Russel G. Means, Wm. B. Morrison, Paul W. Palmer, H. M. Platter, Henry H. Schwarzell, C. C. Sherburne, George P. Sims, Columbus. **Fulton County**—Geo. McGuffin, Pettisville. **Geauga County**—W. C. Cory, Lucy S. Hertzog, Chardon. **Greene County**—P. D. Espey, Xenia. **Guernsey County**—H. W. Arndt, Lore City; M. S. Lawrence, Quaker City. **Hamilton County**—R. S. Austin, David W. Heusinkveld, C. E. Kiely, Daniel C. Rivers, L. Howard Schriver, Parke G. Smith, Emil R. Swepston, Mr. R. A. Swink, Cincinnati.

Hancock County—O. P. Klotz, B. F. Mowry, Findlay. **Hardin County**—F. M. Elliott, Ada. **Henry County**—C. B. Geiger, Holgate; J. R. Bolles, Henry F. Rohrs, Napoleon. **Highland County**—J. C. Larkin, W. B. Roads, Hillsboro. **Holmes County**—A. J. Earney, Millersburg. **Huron County**—Chas. J. Wehr, Bellevue; G. F. Linn, O. J. Nicholson, Norwalk; J. C. Steiner, Willard. **Jefferson County**—E. J. C. Sanders, John P. Smarrella, Steubenville. **Knox County**—James F. Lee, Mt. Vernon. **Lake County**—M. A. Davis, V. N. Marsh, Benj. S. Park, Painesville. **Lawrence County**—Wm. A. French, Jr., Ironton. **Licking County**—George A. Gressle, Donald Sperry, Newark. **Logan County**—J. P. Harbert, F. Blair Webster, Bellefontaine. **Lorain County**—A. S. McKitrick, Elyria.

Lucas County—Barney J. Hein, J. T. Murphy, Wm. A. Neill, Mr. G. W. Cooley, Toledo. **Madison County**—F. E. Rosnagle, London. **Mahoning County**—A. B. Sherk, Campbell; R. H. Middleton, Dean A. Nesbit, Claude B. Norris, R. B. Poling, Wm. M. Skipp, Mr. B. W. Stewart, O. J. Walker, Youngstown. **Marion County**—C. L. Baker, R. G. McMurray, Carl Sawyer, Marion. **Medina County**—R. L. Mansell, Medina; H. T. Pease, Wadsworth. **Mercer County**—M. L. Downing, Rockford. **Miami County**—G. A. Woodhouse, Pleasant Hill; J. F. Hill, West Milton. **Montgomery County**—E. L. Braunlin, H. V. Dutrow, E. M. Huston, Miss Mildred Jeffrey, Dayton. **Morgan County**—Lee Humphrey, Malta; Galen Rex, McConnelsville. **Morrow County**—T. Caris, R. L. Pierce, Mt. Gilead.

Muskingum County—E. R. Brush, Beatrice T. Hagen, Zanesville. **Ottawa County**—A. S. Mack, Oak Harbor; H. J. Pool, C. R. Wood, Port Clinton. **Perry County**—F. J. Crosbie, C. B. McDougal, New Lexington. **Putnam County**—O. J. Fatum, Ottoville. **Richland County**—Chas. R. Keller, L. C. Nigh, Hugh Winbigler, Mansfield. **Scioto County**—J. S. Rardin, Wm. E. Scaggs, Wm. M. Singleton, Portsmouth. **Seneca County**—John M. Leahy, E. F. Ley, R. F. Machamer, Tiffin. **Stark County**—C. B. King, Canton; George N. Wenger, Massillon. **Summit County**—Carl R. Steinke, Akron; J. R. Shoemaker, Cuyahoga Falls. **Tuscarawas County**—David H. Allen, Dover; Jay Calhoon, Uhrichsville. **Union County**—Fred C. Callaway, James M. Snider, H. G. Southard, Marysville.

Van Wert County—L. N. Irvin, Ohio City; C. R. Keyser, Van Wert. **Warren County**—Edward C. Morey, Franklin; J. H. Arnold, Edward Blair, Lebanon. **Washington County**—A. H. Smith, Marietta. **Williams County**—John F. Smith, Montpelier. **Wayne County**—A. J. Hartzler, Wooster. **Wood County**—Daniel R. Barr, Grand Rapids. **Wyandot County**—L. W. Naus, Upper Sandusky.

PROCEEDINGS OF THE COUNCIL

Dates May 3 and 4 Selected for 1939 Annual Meeting at Toledo at October 1 Meeting; Plans for Dissemination of Information on Candidates Approved

THE Council of the Ohio State Medical Association met in regular session Saturday evening, October 1, in the State Headquarters Office, Columbus, Ohio, with the following present: President Hein; President-Elect Smith; Councilors Schriver, Hogue, Klotz, McCormick, McNamee, Skipp, Kirkland, Brush, Seiler and Sherburne; Treasurer Beer; Dr. Forman, Editor of *The Journal;* Executive Secretary Nelson and Assistant Executive Secretary Saville.

Announcement was made that Dr. Alcorn, the Past-President, was convalescing from a recent operation for appendicitis. A resolution wishing him a speedy and complete recovery was adopted.

Membership Statistics—It was announced that the total membership of the State Association as of October 1 was 6,024, a new all-time record, in comparison with 5,855 on the same date a year ago, and with a total of 5,945 for December 31, 1937.

REPORTS OF COUNCILORS

First District—Dr. Schriver reported on visits to the Fayette, Clermont and Adams county medical societies, and on plans to attend a meeting of the Highland County Medical Society.

Second District—It was reported by Dr. Hogue that he had been in touch with, or had attended meetings of, societies in Greene, Champaign, Miami and Clark counties.

Third District—An announcement relative to the Fall meeting of the Northwestern Ohio Medical Society at Defiance on October 4 was made by Dr. Klotz and a special invitation to members of The Council to attend that meeting was extended.

Fourth District—Dr. McCormick reported that he had contacted the presidents and secretaries of all societies in his district relative to legislative matters, and would follow up such contacts between now and the General Election.

Fifth District—Dr. McNamee stated that he had corresponded with the officers of societies in his district and had visited the Ashtabula County Medical Society. He announced a meeting of the Fifth District in Cleveland on October 21.

Sixth District—Officers of all societies in his district have been contacted on the A.M.A. Study of Medical Care and legislative activities, Dr. Skipp reported.

Seventh District—Dr. Kirkland reported he had not visited any societies since the last Council meeting, but had been in touch with several through correspondence.

Eighth District—An invitation to members of The Council to attend the Fall meeting of the Eighth District Society at Granville Inn on October 27 was extended by Dr. Brush.

Ninth District—A report concerning the forthcoming meeting of the Ninth District Society on November 16 at Ironton was made by Dr. Seiler.

Tenth District—Dr. Sherburne reported he had not attended any society meetings since the last Council meeting, but had been in touch with several through correspondence.

All Councilors reported they had been urging local society officers to complete the A. M. A. Study of Medical Care at the earliest possible date, and that they have been cooperating with the Sub-Committee on Legislation in the matter of stimulating legislative activity in the respective counties. Several members of Council, in discussing membership matters, stated that they felt all county societies should solicit the interest of younger physicians. It was pointed out that, in instances where young physicians would not be eligible for membership for a probationary period, it would be advisable for the county society to extend to them a special invitation to attend the society meetings and get acquainted with the activities of the society. Several expressed the belief that special memberships, such as intern or junior memberships, should be accorded younger men.

1939 ANNUAL MEETING

Dates Selected—Verifying its vote by mail, The Council unanimously approved the dates, May 3 and 4, for the 1939 Annual Meeting in Toledo.

Headquarters Hotel—Following a report by the Executive Secretary on a survey of facilities in Toledo in cooperation with a special committee of the Toledo Academy of Medicine, The Council approved the selection of the Commodore Perry Hotel as the headquarters for the 1939 Annual Meeting.

It was reported that the Committee on Scientific Work would meet in the near future to draft a tentative program for presentation and action by The Council at its next meeting.

LEGISLATIVE ACTIVITIES

A detailed report of the work of the Sub-Committee on Legislation was made by President Hein and the Executive Secretary. It was announced that the report would be presented in detail at the Legislative Conference to be held on

the following day at the University Club, Columbus.

Distribution of Information—Following an extensive discussion, on **motion** by Dr. Klotz, seconded by Dr. McCormick and **carried**, The Council approved the following plan of distributing information regarding the various candidates, obtained through interviews or correspondence: Such information, after being assembled at the State Headquarters Office, shall be distributed in bulletin form to the legislative committeeman of each county medical society. A sufficient number of bulletins will be sent to each county medical society so that one copy can be placed in the hands of each member of the society. A letter over the signature of the President shall be sent to each member of the State Association informing him that the information on candidates has been supplied to the legislative committeeman and the secretary of his county medical society.

President Hein urged members of The Council to work with the members of the Sub-Committee on Legislation in seeing that county society committeemen and secretaries disseminate the information bulletins to all members, and stimulate the active interest of all members in this important activity.

Members of The Council expressed themselves as being greatly pleased with the work which has been done by the Sub-Committee on Legislation and congratulated the committee on the excellent setup which had been formulated.

A.M.A. STUDY OF MEDICAL CARE

On **motion** by Dr. Sherburne, seconded by Dr. Klotz and **carried**, The Council established December 1 as the deadline for the assembling of information obtained from questionnaires being used in the A.M.A. Study of Medical Care, and instructed the Executive Secretary to inform all county society secretaries of this action. Members of The Council expressed themselves as believing that establishing a deadline would be the most effective way of speeding up the filling out of the blanks by members.

MISCELLANEOUS

Greene County Amendments—A report of the Judicial and Professional Relations Committee, approving the suggested amendments to its constitution and by-laws proposed by the Greene County Medical Society, and certain changes made by the committee, was adopted, on **motion** by Dr. McCormick, seconded by Dr. Smith and **carried.**

Cancer Program—A request from Dr. Lawrence A. Pomeroy, Cleveland, chairman of the Executive Committee of the Women's Field Army Against Cancer, that members of The Council assist that organization in selecting speakers on cancer for lay audiences at meetings contemplated by the Women's Field Army in various parts of the state, was discussed. On **motion** by Dr. Sherburne, seconded by Dr. Kirkland and **carried**, The Council instructed the Executive Secretary to inform Dr. Pomeroy that members of The Council would be glad to cooperate on this matter and that The Council approved the method of approach in selecting such speakers.

Poor Relief Study—President Hein and the Executive Secretary made a verbal report on the recent meeting and activities of the Special Committee on Poor Relief. On **motion** by Dr. Smith, seconded by Dr. Skipp and **carried**, the report was accepted and the committee congratulated on the excellent start which it had made.

Coordinating Committee—A report on meetings of the Special Coordinating Committee of The Council, appointed to consider the questions involved in the proposed National Health Program, and to work out various plans and programs which might be instituted in Ohio by medical organization, was made by Dr. Smith, chairman of that committee, and President Hein. The committee reported progress and Dr. Smith stated that the committee hoped to have some definite suggestions for consideration by The Council at its next meeting.

A.M.A. Special Session—Reports on the recent Special Session of the House of Delegates of the American Medical Association in Chicago were made by Dr. Brush, Dr. Skipp, Dr. Forman and the Executive Secretary. It was pointed out that transactions of the session were published in the October 1 issue of *The Ohio State Medical Journal* and in the September 24 issue of *The Journal of the American Medical Association.* It was the opinion of individual members of The Council that the final action of the A.M.A. House of Delegates represented a progressive and constructive program which should be followed by the state and local medical societies.

Postgraduate Lectures—The Executive Secretary reported that the postgraduate lectures in Regions C, D, and E had, to date, been extremely successful. Attendance at the first two sessions, held in the three regions was as follows: Mansfield—127 and 158; Zanesville—88 and 74; Dayton—117, Springfield—131. Members of The Council were requested to promote these meetings among any county societies in their respective district which might be included in any of the three regions.

There being no further business, The Council recessed until Sunday, October 2, to attend the Legislative Conference at the University Club, Columbus, for local legislative committeemen and presidents and secretaries of county medical societies.

Attest: CHARLES S. NELSON,
Executive Secretary.

OHIO ACADEMIES STUDYING PLANS TO AID LOW-INCOME GROUP; CINCINNATI "UNIT SYSTEM" IS AMONG NEWEST PROPOSALS

ONE of the newest approaches to the problem of assisting low-income groups to finance medical services is the "Unit System" devised by a Special Committee of the Cincinnati Academy of Medicine, under the chairmanship of Dr. Parke G. Smith.

This plan, which has been approved in principle by the Cincinnati Academy, proposes that the Academy form an organization whose purpose will be to furnish complete medical service, unlimited as to time or amount, to the subscribers to the plan for a fixed sum to be paid by each subscriber monthly. Of the money thus collected, not over 10 per cent is to be used for administration purposes. The balance, 90 per cent, is to be distributed to the physicians furnishing the medical services in proportion to the amount of service they have individually rendered. Subscribers to the plan will have an absolute free choice in the selection of physician.

The distribution of the funds will be made in accordance with what has been termed "The Unit System". A schedule of the comparative value of the various services rendered by the medical profession will be established. Each service that the individual physician furnishes to the subscriber of this plan will be credited to his account as "Units of Service".

A definite accounting period will be determined. It may be on a monthly, quarterly or semi-annual basis. At the end of the period decided upon, of the total funds collected from subscribers, 90 per cent will be distributed to the physicians who have rendered service, according to the number of units to their credit. The monetary value of the unit for that given period will be determined by dividing the total amount available in the fund by the total number of units of service rendered by the profession. Obviously, the value of the unit will vary from period to period.

The upper limit of the income of eligible subscribers to this proposed plan has not as yet been definitely determined. Amount of the periodic payment by subscribers has also to be decided upon.

Steps have been taken to ascertain the legal status of such an organization, both as to the Ohio Corporation Act and the State Insurance Laws.

Other local academies in Ohio are making a study of this problem, notably Cleveland, Toledo, Dayton, Youngstown, Akron and Columbus.

The prepayment plan for financing bills for the medical care of hospitalized patients, proposed by the Economics Committee of the Cleveland Academy of Medicine was outlined in the October, 1938, issue of *The Ohio State Medical Journal*, and has been approved in principle by the Academy's Board of Trustees. The committee was empowered to seek legal advice in formulating the details of the plan. When the details have been worked out, the entire plan will be submitted to the Trustees again for their approval or disapproval, after which it will be submitted to the membership. The Cleveland medical service plan would parallel that of the Cleveland Hospital Service Association which now has over 100,000 members. It would charge the same rate from $7.20 to $9.00 annually and provide payment for medical services in an amount of $6.00 per day for each day of hospitalization. Participation would be limited to those hospitalized under the hospital service plan.

In Toledo a committee headed by Dr. Fred M. Douglass is working on a prepayment plan applicable to groups of employees. The principle involved has been approved by the Toledo Academy of Medicine.

As these various proposals are developed, they are being studied by the Special Coordinating Committee of the Ohio State Medical Association which aims to develop a flexible plan or plans which can be adapted to the needs of their respective counties by county medical societies throughout the state.

COMING MEETINGS

Ohio State Medical Association, Toledo, May 3-4, 1939.

American Medical Association, St. Louis, May 15-19, 1939.

American College of Physicians, New Orleans, March 27-31, 1939.

American Congress of Obstetrics and Gynecology, Cleveland, Sept. 11-15, 1939.

Central Society for Clinical Research, Chicago, Nov. 4-5.

Radiological Society of North America, Pittsburgh, Nov. 28-Dec. 2.

Southern Medical Association, Oklahoma City, Nov. 15-18.

Southern Surgical Association, White Sulphur Springs, W. Va., Dec. 6-8.

Western Surgical Association, Omaha, Dec. 2-3.

DR. BATEMAN NAMED COMMISSIONER OF MENTAL DISEASES; DRS. KARNOSH AND FORDYCE ON ADVISORY COUNCIL

DR. J. FREMONT BATEMAN, superintendent of the Columbus State Hospital has been appointed Commissioner of the Division of Mental Diseases, a new division in the State Department of Public Welfare created by the 92nd Ohio General Assembly during its regular session in the Spring of 1937. (*Ohio State Medical Journal*, July, 1937, issue, pages 796-797). The appointment is for a five-year term.

The act also provided for an advisory council of four members, two of whom must be physicians "expert in the care and treatment of the mentally ill".

Appointees to that council are: Dr. O. O. Fordyce, Toledo, for a term ending Jan. 1, 1939; Dr. Louis J. Karnosh, Cleveland, ending Jan. 1, 1940; Judge Dean May, Akron, term ending Jan. 1, 1941; and Judge Clifford M. Woodside, Youngstown, term ending Jan. 1, 1942. All subsequent appointments to this council will be for terms of four years.



Dr. Fordyce



Dr. Bateman



Dr. Karnosh

A graduate of the University of Cincinnati College of Medicine in 1928, Dr. Bateman was formerly assistant superintendent and clinical director of the Longview State Hospital, Cincinnati. He is a member of the Ohio State Medical Association, Fellow of the American Medical Association, member of the Central Neuropsychiatric Association, American Psychiatric Association and National Committee for Mental Hygiene. Dr. Bateman is professor of clinical psychiatry at the Ohio State University College of Medicine. He has served as both chairman and secretary of the Section on Nervous and Mental Diseases of the Ohio State Medical Association.

Dr. Karnosh is assistant department head of the Division of Neuropsychiatry, Cleveland City Hospital and assistant clinical professor of nervous and mental diseases, Western Reserve Univerity School of Medicine, where he graduated in 1920. He is a member of the Ohio State Medical Association, Fellow of the American Medical Association, member of the American Psychiatric Association and Central Neuropsychiatric Association.

At present superintendent of Toledo State Hospital, Dr. Fordyce graduated at Ohio Medical University, Columbus, in 1905. He is a member of the Ohio State Medical Association, Fellow of the American Medical Association and a member of the American Psychiatric Association.

Institutions under the supervision of the division of mental diseases will be the existing, Athens, Cleveland, Columbus, Dayton, Lima, Longview, Massillon and Toledo state hospitals; the Columbus, Orient and Apple Creek institutions for the feeble-minded; the Gallipolis hospital for epileptics and other similar institutions which may be established.

The development of a state - wide system of outpatient clinics is authorized by the act which created the new division, "for the observation, care and treatment of the mentally ill, and especially for those whose condition is incipient, mild or of possible short duration".

The division is empowered to supervise and inspect all institutions for the mentally ill maintained in whole or in part by public funds or by any political subdivision.

Privately-owned and operated hospitals and institutions for the treatment of the mentally ill and insane must obtain a license from the division of mental diseases. Such institutions will be subject to inspection by the division, and must be in charge of a licensed physician having at least three years' practical experience in the treatment of the mentally ill. If a privately-owned institution furnishes domiciliary care only and at private expense, and not treatment, no license will be required.

The act provides definitions for mentally ill, insane, feeble-minded, idiot, imbecile, moron, and epileptic.

Provision is made for the establishment of a department of mental hygiene in the new division.

While the legislature appropriated funds for the administrative costs of the division, provision has yet to be made for financing outpatient hospitals and other necessary additions to existing state institutions.

DON'T MISS THE REMAINING POSTGRADUATE LECTURES AT MANSFIELD, ZANESVILLE AND DAYTON-SPRINGFIELD

FOUR lectures remain in the Fall Series of the Ohio State Medical Association Regional Postgraduate Lectures now being presented at Mansfield, Dayton-Springfield and Zanesville. Over 400 physicians from the counties comprising the three regions have attended the four sessions held during September and October. The programs have been generally well-received and have been of much practical use to those who attended. The Committee on Education and Sub-Committee on Postgraduate Lectures are hopeful that even more members will attend the remaining lectures.

Speakers and subjects for the balance of the program follow:

MANSFIELD

November 2—"Common Psychoses", by Dr. J. F. Bateman, Columbus; "Cancer of the Breast", by Dr. E. J. McCormick, Toledo.

November 16—"Prenatal and Postnatal Care", by Dr. James M. Pierce, Concinnati; "Infections of the Urinary Tract", by Dr. John S. Lewis, Jr., Youngstown.

November 30—"Angina Pectoris and Coronary Thrombosis", by Dr. George I. Nelson, Columbus; "Fungous Infections of the Skin", by Dr. Charles J. Shepard, Columbus.

December 15—"Arthritis: Medical Aspects", Dr. Russell L. Haden, Cleveland; "Arthritis: Orthopedic Aspects", by Dr. J. I. Kendrick, Cleveland.

All sessions will be held at the Mansfield-Leland Hotel on Wednesday evenings, with the exception of the December 15 session, which is on a Thursday evening.

DAYTON-SPRINGFIELD

November 2—Dayton—"Prophylaxis and Treatment of More Common Contagious Diseases", by Dr. John A. Toomey, Cleveland; "Tuberculosis in Infancy", by Dr. J. Victor Greenebaum, Cincinnati.

November 15—Springfield—"Prenatal and Postnatal Care", by Dr. Floyd S. Mowry, Cleveland; "Infections of the Urinary Tract", by Dr. G. P. McKim, Cincinnati.

November 30—Dayton—"Clinical Aspects of Arteriosclerosis", by Dr. Clifford J. Straehley, Cincinnati; "Fungous Infections of the Skin", by Dr. Claude B. Norris, Youngstown.

December 14—Springfield—"Arthritis: Medical Aspects", Dr. Louis A. Levison, Toledo; "Arthritis: Orthopedic Aspects", by Dr. Walter G. Stern, Cleveland.

Meetings in Dayton will be held in the auditorium of the Montgomery County Medical Society, which is located in the Fidelity Medical Building. Sessions at Springfield will be held at the Hotel Shawnee. All meetings are on Wednesday evenings.

ZANESVILLE

November 3—"Common Psychoses", by Dr. E. A. Baber, Cincinnati; "Cancer of the Breast", by Dr. R. S. Dinsmore, Cleveland.

November 17—"Prenatal and Postnatal Care", by Dr. Theodore Miller, Cleveland; "Infections of the Urinary Tract", by Dr. Wm. J. Engel, Cleveland.

December 1—"Angina Pectoris and Coronary Thrombosis", by Dr. Wm. H. Bunn, Youngstown; "Fungous Infections of the Skin", by Dr. E. W. Netherton, Cleveland.

December 1—"Intestinal Obstruction" by Dr. E. R. Arn, Dayton; "Common Lesions of the Cervix; Differential Diagnosis, Preventive Measures and Treatment", by Dr. Philip J. Reel, Columbus.

Meetings are held in the Grotto Hall, Corner Fourth and Market Streets, on Thursday evenings.

Lectures are scheduled to begin promptly at seven o'clock at all sessions.

O. S. U. Homecoming Clinics Nov. 19

The new out-patient, dispensary and contagious disease wing of Starling Loving University Hospital, Columbus, will be formally opened on Saturday morning, November 19, the day of the Ohio State-Michigan football game.

Clinical demonstrations of interesting cases will be presented by members of the staff of the College of Medicine during the morning. Dr. J. H. J. Upham, dean of the College and Dr. Russel G. Means, chairman of Post-Collegiate Assemblies, cordially invite all Ohio physicians to visit the new building and attend the annual homecoming clinic.

Lima Postgraduate Session

The annual postgraduate course sponsored by the Academy of Medicine of Lima and Allen County was held at the Eagles' Home, Lima, September 22 to 27. Speakers were Dr. Carl E. Badgley, professor of orthopedics, University of Michigan Medical School, and Dr. Charles A. Doan, professor of medicine, Ohio State University College of Medicine.

Dr. Worstell New Assistant Head of Medical Section, Industrial Commission

Dr. Henry P. Worstell, Columbus, has been appointed assistant supervisor of the Medical Section, State Industrial Commission, succeeding Dr. Roy J. Secrest, who resigned October 15, to enter private practice in Columbus. Dr. Secrest will be associated with Dr. Harry E. LeFever, specializing in neurology.



Dr. Worstell

A graduate of the State University of Iowa College of Medicine in 1928, Dr. Worstell served two years of internship at Mercy Hospital, Toledo. He then took two and one-half years of postgraduate training in orthopedic surgery under Dr. Arthur Steindler at the University Hospital, Iowa City, Iowa.

After specializing in this field in Columbus in private practice for three years, Dr. Worstell two years ago became orthopedic consultant for the State Industrial Commission. He holds a certificate of the American Board of Orthopaedic Surgery, and is a member of the Columbus Academy of Medicine, the Ohio State Medical Association and the American Medical Association.

Dr. George M. Churukian, Cleveland, has been appointed to the medical staff of the State Industrial Commission. Dr. Churukian graduated at the American University of Beirut, Syria, School of Medicine in 1926, and passed the examination of the National Board of Medical Examiners in 1930. He has since practiced in Cleveland, where he was a member of the staff of Mt. Sinai Hospital.

Blood Tests Competent Evidence In Paternity Cases, Appeals Court Rules

Results of blood tests are competent evidence in paternity cases, the Second District Court of Appeals held recently in a decision said to be the first of this kind in Ohio. The higher court upheld Judge Clayton W. Rose, Franklin County Judge of the Court of Domestic Relations, who ordered a new trial in a case in which the jury found an alleged father guilty, despite expert testimony based on blood tests, that absolved him of the charge. It is likely that the case will be carried to the Ohio Supreme Court so that the highest state court can rule on the competency of blood test evidence.

Physicians of Ninth District to Meet at Elks' Club, Ironton, November 16

A meeting of the Ninth Councilor District of the Ohio State Medical Association will be held in the auditorium of the Elk's Club, Ironton, Wednesday, November 16, beginning with a luncheon at 12 o'clock, followed by an address by Dr. Parke G. Smith, Cincinnati, President-Elect of the Ohio State Medical Association, on "Some of the National Economic Problems Facing the Profession". Charles S. Nelson, Executive Secretary of the Association, will discuss organization matters, after which there will be a business meeting of the Ninth District Society.

The scientific program beginning at 2 o'clock, will consist of three addresses: "The Surgical Treatment of Essential Hypertension", by Dr. George W. Crile, Cleveland; "Function Heart Tests", by Dr. Julien E. Benjamin, Cincinnati; and "Allergy in Everyday Practice", by Dr. Jonathan Forman. A short discussion period will follow each paper.

Arrangements for the meeting are being made by the District Society officers: Dr. William F. Marting, Ironton, president; Dr. V. V. Smith, Ironton, secretary, and Dr. I. P. Seiler, Piketon, Councilor.

Health Commissioners to Meet in Columbus, November 17-18

The Nineteenth Annual Conference of Ohio Health Commissioners will be held at the Deshler-Wallick Hotel, Columbus, Thursday and Friday, November 17 and 18. Speakers scheduled to appear on the program include: Dr. Henry C. Schumacher, director of the Child Guidance Clinic, Cleveland; Dr. John Sundwall, professor of hygiene and public health, University of Michigan, Ann Arbor, Mich.; Dr. Allen W. Freeman, professor of hygiene and public health, Johns Hopkins University, Baltimore, Md.; Dr. M. A. Blankenhorn, director, Department of Internal Medicine, University of Cincinnati College of Medicine; Dr. James Ruegsegger, Division of Pneumonia Research, University of Cincinnati College of Medicine; Judge Henry L. Robison, chief, Division of Public Assistance, State Department of Welfare; Dr. John A. Toomey, Director of Contagious Diseases, City Hospital, Cleveland; Pearl McIver, R.N., Consultant Nurse, United States Public Health Service, Washington, D. C.; Dr. Samuel Goldblatt, Cincinnati.

Dr. Barney J. Hein, Toledo, President of the Ohio State Medical Association will speak at a public health dinner to be held Thursday evening, November 17, at 6 o'clock. On Friday morning, at 8 o'clock, there will be a pioneer health commissioners' breakfast and on Friday noon a luncheon for public health nurses.

PRINCIPLES GOVERNING MEDICAL SERVICES FOR HOSPITALIZED CASES ON INSURANCE BASIS ADOPTED BY A. H. A.

A SIGNIFICANT statement concerning the principles of relationship between approved hospital service associations and the medical profession in programs to provide medical services on an insurance basis to hospital patients of limited income was adopted by the House of Delegates of the American Hospital Association at its annual session held in Dallas, Texas, September 26-30.

Prepared by the Board of Trustees of the Association, the statement as approved, read as follows:

"With more than 2,000,000 subscribers enrolled, and with membership increasing at the rate of more than one million per year, hospital service plans approved by the American Hospital Association are not only helping patients to pay their hospital bills, but are also contributing indirectly to the preservation of private medical practice in hospitals.

"The prevalent restriction of these plans to semiprivate hospital service, and the omission of any provision for physicians' fees in hospital cases, have placed non-profit hospital care insurance beyond the reach of many employed workers of limited income.

"There is a strong demand on the part of these low income groups for the creation of hospital service plans adapted to their means. Medical societies are now studying, and in some cases are preparing to sponsor, group payment plans to cover medical fees of patients of limited means. If these efforts are successful, they will reclaim for private medical practice a segment of medical service in hospitals even larger than that which is protected by existing hospital care insurance plans.

"The American Hospital Association believes that efforts by the local medical profession to extend the voluntary insurance principles to medical fees in hospital practice can be assisted by cooperation with approved hospital care insurance plans. Approved plans are urged to offer their cooperation and assistance to this end. Joint efforts will make hospital care available to millions of persons of limited means, who in this manner would pay for both hospital care and medical treatment in hospitals.

"The American Hospital Association is prepared to approve periodic payment plans for hospital care and medical service in hospitals which are also approved by the local medical profession and which conform to the following principles:

"1. Sponsorship and control by non-profit organizations representative of hospitals, the medical profession, and the public.

"2. Free choice of physician and free choice of hospital consistent with existing relations between approved hospitals and their physicians.

"3. Financial soundness and adequate accounting.

"4. Equitable payments to physicians and to hospitals.

"5. Separate finances and reserves for hospital care and for medical services of attending physicians.

"6. Hospital and medical service benefits determined by hospitals and the local profession.

"7. Dignified promotion and administration.

"The American Medical Association is invited to confer with the American Hospital Association regarding these and related problems with a view to harmonious joint action in the public interest."

In taking this action, the American Hospital Association recognizes that free choice of physician and free choice of hospital are essential to good medical care, and that each physician has the right to control the terms of his service.

The action is also in accord with the established policy of the House of Delegates of the American Medical Association that any plan for providing hospital and medical care must maintain separate finances and reserves for hospital care and for medical services.

As stated in *The Journal of the American Medical Association*, October 15, 1938, issue, page 1470, "The action taken by both the American Medical Association and the American Hospital Association now permits the establishment of cooperative plans for group payment for medical service without invalidating any of those ideals or principles associated with medical care which are vital to the provision of good service."

Attorney General Opinion

The following opinion, (No. 2991), was issued recently by Attorney General Herbert S. Duffy:

State Department of Health—Expenses of local officers—Neither Secs. 1240-2 nor 1252-1, G. C., confer upon the State Department of Health authority to compel attendance of local officers to a general conference called by the Department of Health for information and education as to matters coming within those sections. The expenses of such officers therefore can not be paid by their local subdivisions. However, should local subdivisions desire attendance of an officer to a conference called by the State Department of Health on Sewage Disposal and Water Purification because of information or training needed for some definitely contemplated course of action on water purification or sewage disposal, the subdivisions may instruct said officers to attend such a conference and provide expenses therefor.

LARGER ALLOTMENT OF FEDERAL FUNDS TO OHIO WILL ALLOW IMPROVEMENTS TO BE MADE IN VENEREAL DISEASE PROGRAM

LOCAL health districts throughout Ohio have been requested by the State Department of Health to submit plans and budgets for participation in the allotment of funds made available for venereal disease control by the passage of the LaFollette-Bullwinkle Bill at the last session of Congress. Ohio's share of the $3,000,000 appropriation for the present fiscal year is $110,784. This will be augmented by approximately $36,000 of state funds and such local funds as may be available.

Three factors will be considered in the allotment of Federal funds: (1) population; (2) financial needs, and (3) the reported incidence of syphilis. Proposed budgets are subject to final approval of the United States Public Health Service, on recommendation of the State Director of Health. Officials of the State Department of Health have stated that none of these funds will be used for the establishment of new clinics.

SCOPE OF PROGRAM EXPLAINED

In a recent letter to local health commissioners, Dr. Walter H. Hartung, State Director of Health, explained the scope of the program and how the funds may be used.

For administrative purposes, the regulations adopted by the Conference of State and Territorial Health Officers prescribe provisions governing the distribution and use of these funds.

Under these regulations, the State Department of Health is obliged to extend the state program of service for local health districts, as follows:

a. The strengthening of the state (and local) laboratories of accepted standards sufficiently to allow for the increased demand caused by the expanded disease control services.

b. To provide for the free distribution of antisyphilitic drugs at the request of any physician for the treatment of any patient.

c. To provide for a complete system of reporting morbidity of the venereal diseases, which requires the installation of a central tabulating unit; and to provide for effective supervision and administration.

These features of the state program, which are mandatory, are chargeable for the most part against the total amount allotted to Ohio. The cost of the services in the State Health Department is approximately 35 per cent of the total, less than 20 per cent of which is for the administrative features of the service.

HOW FUNDS MAY BE USED

The balance of these funds are available for distribution to local health districts as cash allotments or supplementary service as follows:

1. The present practice of payment of private practicing physicians for the treatment of indigents in the infectious stages of syphilis of rural communities will be continued. The fee basis does not apply to health departments and clinics.

2. It is proposed to extend this practice of payment on a fee basis by the State Department of Health, to include those city health districts of five to ten thousand in population with effective city health services, when the development of a clinic service is impracticable or inadvisable.

3. For city health districts with effective health services 10,000 in population or more, cash allotments will be available for distribution to supplement the local venereal disease control service.

HOW FUNDS OBTAINED

To be eligible for allocation of funds, the local health department must first submit to the State Department of Health, a plan of operation which shall include:

a. A comprehensive statement of the present venereal disease control organization, program and budget. The statement should include the 1937 expenditures of both official and voluntary agencies in the case of clinic or organized treatment services, which are coordinated or to be coordinated in the program.

b. A proposed plan for strengthening or improving the local venereal disease program with the assistance of the funds as allocated.

c. A certificate that the expenditures of local agencies will not be reduced or curtailed through the expenditures of these funds. No payment may be used to replace existing local appropriations to relieve local authorities of expenditures now being made.

In general, it is recommended that the plan should show that the funds will be used to effect a comprehensive venereal disease program under adequate supervision, rather than merely the addition of supplementary personnel for a routine service.

Personnel employed in local service through the use of these funds are appointed by local boards of health in the same manner as other employees of the health department. The State Department of Health reserves the right to approve the technical qualifications of personnel before appointments are made, in accordance with the minimum standards prescribed in the regulations for technical personnel.

Do You Know - - -

The winter examinations of the State Medical Board will be held at Columbus, December 7, 8 and 9.

* * *

The National Association of Fever Therapy Technicians, Inc., a non-profit-corporation was recently formed in Illinois. Anyone interested in joining should write the secretary, Miss Lillian Conrad, 646 N. Michigan Ave., Chicago, Ill.

* * *

Since 1920, approximately 8,400 crippled children in Ohio have been given medical or surgical treatment through the Bureau of Charities of the State Department of Public Welfare.

* * *

Four sons of Dr. J. F. Ockuly, Defiance, are following their father in the practice of medicine. The eldest, Dr. E. A. Ockuly, practices in Toledo. Three sons are at St. Louis University—Edward, a senior in medicine; Orville, a freshman in medicine, and John, in the first year of his pre-medical course.

* * *

One-fourth of the approximately 36,000,000 social security numbers issued by the Social Security Board have been assigned to women. More than 40 per cent of all account holders are under 30 years of age, and more than 54 per cent are under 35. The median age of all account card holders is 33. About 2 per cent of the women and 5.3 per cent of the men holding account cards are 60 years of age or over.

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A committee composed of reserve officers of the Medical Corps of the United States Army recently displayed an exhibit of medical field equipment in the Academy of Medicine Building, Cleveland.

* * *

Ohio sales tax collections were 26.31 per cent less in the first nine months of 1938 than in the same period in 1937. The loss, which falls principally on schools and local governments, exceeds $10,000,000.

* * *

S. E. Massengill Company, Bristol, Tenn., was recently fined $16,800 on 112 counts by a Federal court in Greenville, Tenn., which upheld the contention of the U. S. Department of Justice and the Food and Drug Administration that the Company was guilty of misbranding and adulteration in connection with the sale of Elixir of Sulfanilamide.

* * *

The Industrial Commission Premium Rate has advanced from 50 cents to 60 cents per $100 of payroll for institutions classified as hospitals and asylums in Ohio.

The first seizure made under the new Federal Food, Drug and Cosmetic Act was that of an eyelash dye—"Lash Lure, the New and Improved Eyebrow and Lash Dye"—manufactured by the Cosmetic Manufacturing Company, Los Angeles. The government charges that this product is adulterated, in that it contains a poisonous or deleterious substance, paraphenylenediamine, which may make it injurious to users.

* * *

All French children are now required to be immunized against diphtheria during infancy or the second or third year of life.

* * *

Ohio physicians who attended the postgraduate course recently given by the University of Buffalo School of Medicine, Buffalo, N. Y., were: Dr. H. G. Deerhake, Spencerville; Dr. R. L. Garster, Upper Sandusky; Dr. H. R. Mayberry, Bryan; Dr. J. R. H. McDaniel, East Fultonham; Dr. H. T. Pease, Wadsworth; Dr. P. P. Pease, Chardon; Dr. Neven P. Stauffer, Killbuck; Dr. J. F. Torrence, Germantown; Dr. E. M. Wright, Coshocton, and Dr. C. E. Northrup, McConnelsville.

* * *

A committee of representative Ohio citizens has been selected by the Ohio Educational Association to study the problem of finding sources of tax revenue to finance the state school foundation fund, which it is estimated will have a deficit of $17,000,000 by November 30.

* * *

Dr. Fred G. Carter, executive director, Christ Hospital, Cincinnati, was recently named President-Elect of the American Hospital Association.

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Dr. Perrin Long, of Johns Hopkins Hospital, Baltimore, Md., authority on sulfanilamide, is a native Ohioan, and son of a physician, Dr. James W. Long, Bryan.

* * *

John Fahey, chairman of the Federal Home Loan Bank Board, Washington, D. C., is the new president of the Twentieth Century Fund. It will be recalled that last year the Board advanced $40,000 of H.O.L.C. funds to subsidize the Group Health Association, brain child of the Fund.

* * *

The Labor Party, now in power in New Zealand, has proposed a system of state medicine which includes "a universal general practitioner service free to all members of the community who require medical attention". The scheme embraces free hospital or sanatorium treatment for all, free medicines and free maternity care. No provision is made for specialist services outside of hospitals.

IN MEMORIAM

Henry Franklin Bean, M.D., Portsmouth; University of Louisville School of Medicine, 1876; aged 85; died September 11. Dr. Bean retired five years ago after having been in Portsmouth since 1920. He had previously practiced for many years in Sulphur Springs and Owensboro, Ky. Dr. Bean was a member of the Methodist Episcopal Church. Surviving are three sons, two daughters, three brothers and a sister.

Homer C. Behymer, M.D., Amelia; Eclectic Medical College, Cincinnati, 1895; aged 69; died September 8. Dr. Behymer practiced in Amelia for 34 years and in Nicholsville for one year. He retired because of ill health in 1932. Dr. Behymer was a Mason. A son, a daughter and a sister survive.

William Elmer Boyer, M.D., Newark; Starling Medical College, Columbus, 1897; aged 69; member of the Ohio State Medical Association and the American Medical Association; died October 4. Dr. Boyer opened his first office in Frazeysburg, later locating in Newark. He was a member of the B.P.O.E., and the Masonic Order. Surviving are his widow, a daughter, a step-daughter and a sister.

Theodore Toy Donaldson, M.D., Worthington; Ohio State University College of Medicine, 1929; aged 33; former member of the Ohio State Medical Association and the American Medical Association; died October 4. A resident of Powell, Dr. Donaldson had practiced in Worthington for the past two and one-half years, after having been located in Columbus for several years. Dr. Donaldson was a member of Phi Rho Sigma and the B.P.O.E. His widow, a daughter and two brothers survive.

Willard H. Gage, Seattle, Washington; Eclectic Medical College, Cincinnati, 1899; aged 61; died September 18. Dr. Gage was well known in Hardin County, having practiced in Kenton 30 years ago. For the past 23 years he had been in the Alaskan government service. His mother and three sisters survive.

Rufus V. Gamble, M.D., Elyria; Western Reserve University School of Medicine, Cleveland, 1871; aged 89; died September 28. Dr. Gamble, who was the oldest living graduate of Western Reserve, first practiced in Valley City, later moving to New London, where he was located until 1916. During that year he opened an office in Elyria and continued there in limited practice until his death. A daughter survives.

Louis A. Grear, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1895; aged 67; died September 2. Dr. Grear practiced in Cincinnati for 42 years. He was a member of the B.P.O.E. and the Eagles. His widow, a daughter and two sisters survive.

George Washington Henderson, M.D., Westerville; Starling Medical College, Columbus, 1892; aged 81; former member of the Ohio State Medical Association and the American Medical Association; died September 23. In active practice in Westerville from 1917 to 1932, Dr. Henderson had been in ill health for several years. He formerly practiced in Lafayette. Surviving are his widow and a son.

Wendell Ambrose Jones, M.D., Riverside, California; Ohio Medical University, Columbus, 1898; member of the California State Medical Association and the American Medical Association; died September 21. Dr. Jones formerly practiced in Worthington and Westerville.

Jacob Austin Knight, M.D., Orient; Starling Medical College, Columbus, 1903; aged 67; former member of the Ohio State Medical Association and the American Medical Association; died September 23. Visiting physician at the State Institution for the Feeble-Minded at Orient for 28 years, Dr. Knight had also been in private practice for 35 years. He was a member of the Masonic Order and the I.O.O.F.

Woodrow Charles Pickering, M.D., Columbus; Ohio Medical University, Columbus, 1901; aged 64; member of the Ohio State Medical Association and the American Medical Association; died September 22. Dr. Pickering was physician for the Police and Fire Departments of Columbus for 31 years. He was a member of the Masonic Order. His widow and a brother survive.

Andrew Joseph Slaven, M.D., Dayton; Bellevue Hospital Medical College, New York, 1898; aged 68; died September 19. Dr. Slaven practiced in Dayton for nearly 40 years. He was a member and past-president of the local Eagles' Lodge. Surviving are his widow, two daughters, two sons, three sisters.

William C. Weber, M.D., Cleveland; Starling Medical College, Columbus, 1888; aged 79; life member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 15. Former department head of the Wooster Medical College, now a part of Western Reserve University, Dr. Weber retired in 1924. He had practiced in Cleveland since 1890, and was formerly chief of staff of the old German Hospital, and served on the staffs at St. Vincent, Charity and St. Alexis hospitals. Dr. Weber was a Mason. His widow, a son and a daughter survive.

Revision of Relief Laws Endorsed by Ohio Welfare Conference

Dr. Charles A. Neal, Cincinnati, superintendent of the Hamilton County Home, and former state director of health, was elected president of the Ohio Welfare Conference during its 48th annual session at the Deshler-Wallick Hotel, Columbus, October 4-7.

The Conference went on record in favor of a revision of Ohio's poor relief laws, which would lodge state supervision of poor relief in the State Welfare Department, and center responsibility for local administration in a county unit. The Conference favored placing state and county relief employees under civil service, and expressed opposition to the rigid limits on administrative costs contained in existing statutes. Joint state and local financing of relief was considered desirable.

The theme of the Conference was "Our Common Responsibility for Common Welfare". Among those who participated in the program of the health divisions were: Bleecker Marquette, executive secretary of the Cincinnati Public Health Federation; Dr. M. C. Hanson, city health commissioner, Toledo; Dr. Joseph W. Mountin, U. S. Public Health Service, Washington, D. C.; Dr. John A. Toomey, Cleveland; Dr. A. W. Thomas, chief of the Bureau of Child Hygiene, State Department of Health; Dr. J. H. J. Upham, Dean of Ohio State University College of Medicine; Dr. E. G. Horton, Dr. J. W. Wilce and Dr. J. F. Bateman, Columbus; Dr. Oscar B. Markey, Cleveland; Dr. Ralph W. Holmes, Chillicothe; Dr. Carl A. Wilzbach, executive secretary, Cincinnati Social Hygiene Society; Dr. Harold J. Gordon, Akron; Dr. Walter Clarke, executive director, American Social Hygiene Association; Dr. W. P. Johnson, chief, Bureau of Venereal Diseases, State Department of Health, and Dr. Neal.

Physicians Open Offices

Physicians who have recently opened offices in Ohio include the following: Dr. V. H. Kemper, Troy; Dr. John E. Allgood, Petersburg; Dr. M. Reed Chappel, Athens; Dr. Frederick M. Kenan, Upper Sandusky; Dr. E. L. Jackson, Shelby; Dr. Frederick W. Rea, Marion; Dr. Robert W. Gregg, Marengo; Dr. Harry Kurtz, Stoutsville; Dr. A. B. McConagha, Worthington; Dr. William H. Eberle, Ashtabula; Dr. N. M. Newport, Roseville; Dr. I. E. Treece, Findlay; Dr. Frederick Kaylor, Bellefontaine; Dr. Lena Enright, Findlay; Dr. Raymond S. Rosedale, Canton; Dr. John O. Perry, Perrysburg; Dr. Henry I. Schwensen, Canton; Dr. C. I. Stafford, Oxford.

Refresher Courses in Obstetrics Planned at Chillicothe and Wauseon

Under the auspices of the State Department of Health, refresher courses in obstetrics will be presented at Chillicothe on November 3 and at Wauseon on November 10.

Dr. Charles W. Pavey, Columbus, assistant professor of obstetrics, Ohio State University College of Medicine, will speak at the Chillicothe session. The Ross County Medical Society will be the host society, with physicians in Pickaway, Hocking, Vinton, Jackson, Pike and Highland counties invited to attend. The session will begin with a dinner at 6:30 P. M. at the Hotel Warner.

The Fulton County Medical Society will be the host society for the November 10 meeting at the DeEtte Harrison Detwiler Memorial Hospital, Wauseon. Physicians will be invited from Williams, Defiance, Henry and Lucas counties. Case reports will be considered at the morning session, beginning at 10 o'clock. In the afternoon, from two until four o'clock, the session will be devoted to "Differential Diagnosis and Treatment of Hemorrhage". The speaker will be Dr. Arthur J. Skeel, Cleveland.

A clinical refresher course in pediatrics has been arranged for December 7 at the Cincinnati General Hospital by Dr. Robert A. Lyon, assistant professor of pediatrics, and other members of the pediatric staff of the University of Cincinnati College of Medicine. The purpose of this course is to demonstrate technique in pediatrics and hospital treatment and in the diagnosis of diseases of children. Physicians residing in the vicinity of Cincinnati will be invited to attend. Further information concerning the course will be announced later.

These courses are presented by the Bureau of Child Hygiene of the State Department of Health as part of the Federal Social Security program.

Physicians Needing Office Help Should Consult Ohio Employment Bureau

The Ohio State Employment Service, a division of the Ohio Unemployment Compensation Division, with offices in all the industrial centers of the state, offers its services to physicians.

Persons available for employment include office assistants, trained and practical nurses, laboratory technicians and domestic workers. All applicants have been carefully interviewed by the Employment Service, and complete records made of their training and experience. There is no fee or charge of any kind for this service, either to the employer or employe.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

ADAMS

A meeting of the Adams County Medical Society was held at the Main Hotel, Winchester, Wednesday, October 19. At the morning session, Dr. J. G. Inman, Manchester spoke on "Tonsillectomy". Dr. R. L. Lawwill, Seaman, led the discussion. The report of the legislative committee was made by Dr. S. J. Ellison, West Union. In the afternoon Dr. Clyde E. Shinkle, Cincinnati, spoke on "Infantile Paralysis". Dr. R. E. Wenrick, Winchester, was the discussant. "The State of the County Regarding Public Health", was the subject presented by Dr. Otto K. Engelke, West Union, and discussed by Dr. W. L. Faul, Sr., Russellville.—O. T. Sproull, M.D., secretary.

BUTLER

Dr. Mark Millikin discussed "Medical Economics" at a meeting of the Butler County Medical Society, Thursday afternoon, September 22, at the Mercy Hospital Nurses' Home, Hamilton. A general discussion of socialized medicine followed.—News clipping.

CLINTON

Following a custom of long standing, the Clinton County Medical Society ended the summer vacation with a picnic at the summer home of Dr. Frank A. Peelle, Wilmington.

At a noon meeting of the society, Tuesday, October 4, Dr. Parke G. Smith, Cincinnati, gave one of his enlightening and helpful talks on "Abnormal Renal Mobility", which brought out much discussion. On request, Dr. Smith also discussed some of the present medico-economic problems confronting the medical profession in Ohio and elsewhere. This was one of the best meetings of the year.—Elizabeth Shrieves, M.D., corresponding secretary.

HAMILTON

The following programs were presented by the Academy of Medicine of Cincinnati during October.

October 4—"Low Intraspinal Lesions as a Cause of Low Back and Sciatic Pain", by Dr. R. Glenn Spurling, associate professor of neurosurgery, University of Louisville School of Medicine, Louisville, Ky.

October 11—"Medical Aspects of Chronic Lung Infections", by Dr. John H. Skavlem; discussant—Dr. M. A. Blankenhorn. "Bronchoscopic Examination in Lung Diseases", by Dr. Robert E. Howard; discussant—Dr. Samuel Iglauer. "Surgical Aspects of Lung Diseases", by Dr. B. N. Carter.

October 18—"Pituitary Therapy in General Practice", by Dr. Elmer L. Sevringhaus, professor of medicine, University of Wisconsin Medical School.

October 25—"Removal of Foreign Bodies from the Upper Food and Air Passages", by Dr. Gerson Lowenthal; discussant—Dr. Harry H. Haggart. "Frontal Hyperostosis Syndrome", by Dr. Harry M. Salzer; discussant—Dr. Archie Fine.—Bulletin.

WARREN

Dr. Walter A. Reese, Middletown, spoke on "The Present Status of Endocrinology", at a meeting of the Warren County Medical Society, in the Council Room of the Lebanon Town Hall, Monday, October 3.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

DARKE

A proposal for the medical care of clients of the Farm Security Administration in the county was presented to the members of the Darke County Medical Society, Friday evening, October 21, by Dr. F. V. Meriwether, Indianapolis, Ind., regional medical consultant for FSA. A report was made by the legislative committee. The meeting was held in the Cul-Mor Tea Room, Greenville.—W. D. Bishop, M.D., secretary.

GREENE

Dr. R. E. Tyvand, Dayton, gave an excellent lecture on "Genito-Urinary Diseases", at a meeting of the Greene County Medical Society, Thursday, October 6. Dr. Paul D. Espey reported to the society on the legislative conference of the Ohio State Medical Association held at Columbus, October 2.—Donald F. Kyle, M.D., secretary.

MIAMI

The work of the Federal Bureau of Investigation, United States Department of Justice, was explained by H. D. Harris, special agent in charge of the Cincinnati office of the Bureau, at a meeting of the Miami County Medical Society, Thursday afternoon, October 6, at the Piqua Country Club. This was the annual dinner meeting of the society with wives of the members as guests.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

At a meeting of the Montgomery County Medical Society in the auditorium of the Fidelity Medical Building, Dayton, Friday evening, Oc-

tober 7, Dr. M. T. Hoerner spoke on the "Surgical Treatment of Lesions Producing Jaundice", and Dr. T. E. Newell discussed "Etiology and Differentiation of Jaundice".

Clyde A. Hyre, financial secretary of Miami Valley Hospital, Dayton, explained "Hospital Insurance", at a meeting of the society, Friday evening, October 21.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCILOR: O. P. KLOTZ, M.D., FINDLAY)

AUGLAIZE

Dr. George T. Harding, Columbus, spoke on "Psychiatric Problems in General Practice", at a meeting of the Auglaize County Medical Society, Thursday evening, October 13, at the Court House, Wapakoneta. Dr. O. P. Klotz, Findlay, Councilor for the Third District, talked on "Recent Phases of the Federal Attempt to Socialize Medicine". Reports were made by the officers on the Legislative Conference held at Columbus, October 2.—Chas. C. Berlin, M.D., secretary.

HARDIN

Dr. T. G. Yeomans, St. Joseph, Mich., was guest speaker at a meeting of the Hardin County Medical Society, Saturday evening, September 17, at Kenton. Dr. F. V. Meriwether, Indianapolis, Indiana, regional medical consultant for the Farm Security Administration, explained the administration's plan for medical care of its clients.—News clipping.

SENECA

"Allergy" was the subject discussed by Dr. Karl D. Figley, Toledo, at a meeting of the Seneca County Medical Society, Thursday evening, October 13, at the Shawhan Hotel, Tiffin.—Edmund F. Ley, M.D., secretary.

WYANDOT

Plans for the building of a local hospital were discussed at a meeting of the Wyandot County Medical Society, Thursday evening, Otcober 29, at Upper Sandusky.—News clipping.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

LUCAS

The following programs were presented by the Toledo Academy of Medicine during October.

October 7—General Meeting. Symposium on Medical Economics. "More Recent Developments in Medical Economics", by Dr. B. J. Hein, President of the Ohio State Medical Association; "What the State Association is Planning for Low Income Groups", by Dr. Fred M. Douglass; "Your Congressmen and Their Attitude Toward Organized Medicine", by Dr. W. A. Neill.

October 14—Section of Pathology, Experimental Medicine and Bacteriology. "Laryngoscopy Esophagoscopy, and Bronchoscopy Under Intravenous Anesthesia", by Dr. M. P. Cooper; "Endotracheal Anesthesia in Tonsillectomy", by Dr. K. C. McCarthy.

October 21—Medical Section. "Interrelationship of Infection and Nutrition", by Dr. Joseph A. Johnston, pediatrician-in-chief, Henry Ford Hospital, Detroit, Mich.

October 28—Surgical Section. Closing evening program of the Postgraduate Day presented by the Medical Institute of the University of Toledo. "The Management of Acute Contagious Diseases and Their Complications", by Dr. J. A. Toomey, Cleveland; "The Management of Uterine Prolapse", by Dr. L. E. Phaneuf, Tufts College Medical School, Boston, Mass.—Bulletin.

WOOD

"Rabies; Diagnosis, Treatment and Prevention", was the subject presented by Dr. Paul F. Orr, Perrysburg, at a dinner meeting of the Wood County Medical Society, Thursday, October 20, at the Women's Club, Bowling Green. Dr. O. P. Klotz, Findlay, Councilor for the Third District, discussed the Farm Security Administration program for medical care to its clients.—R. N. Whitehead, M.D., secretary.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

CUYAHOGA

The following programs were presented by the Academy of Medicine of Cleveland during October:

October 7—Clinical and Pathological Section. "End Results of Laryngectomies", by Dr. J. W. McCall and Dr. H. C. Rosenberger; "Treatment of Scleroderma", by Dr. F. A. LeFevre; "Tumor of the Femur", by Dr. T. A. Willis; "Treatment of Hematemesis and Melena", by Dr. E. E. Woldman; "Endometriosis of the Sigmoid Colon with Obstruction", by Dr. J. V. Seids.

October 7—Joint Meeting of the Military Section with the Cleveland Military District. Address by Major General Chas. Reynolds, Surgeon General of the United States Army.

October 14—Joint Meeting of the Experimental Medicine Section and Cleveland Section of the Society for Experimental Biology and Medicine. "Diluted and Undiluted Diphtheria Toxoid as Immunizing Agents in Man", by Hortense Schmitz; "The Appearance of Centers of Ossification from Birth to Five Years", by Dr. Carl C. Francis and Dr. Peter P. Werle; "Urinary Specific Gravity", by J. W. Price, Ph.D., Dr. Max Miller and Dr. J. M. Hayman, Jr.; "Complement and Ascorbic Acid in Human Scurvy", by E. E.

RECENT ADVANCES IN THE SCIENCE OF NUTRITION

III. Some Attainments in the Fields of Vitamin A Research

● During the twenty-five years since its discovery, vitamin A has been the subject of much intensive research, first by the biochemist and physiologist, and later by the clinician and organic chemist. It may be of interest to describe briefly several of the achievements made in these various fields of research on vitamin A.

It has been found that vitamin A is unique among the vitamins thus far discovered. It is apparently the only vitamin produced solely by animal metabolism from precursors —certain carotenoid pigments—which are themselves solely the products of plant metabolism. The structure of the vitamin has been established and checked by syntheses of closely allied forms and probably of the pure vitamin itself (1).

Physiological and clinical researches have provided explanations of the mode of absorption of the vitamin and the mechanisms of transport and storage in the body (2). The specific pathological effects of varying degrees of vitamin A deficiency in humans have been extensively studied. Many of the older ideas concerning specific effects of vitamin A on man have been confirmed; some of the older beliefs have been dispelled (2).

Recent years have also brought improvements in assay methods for vitamin A (3). Common American foods have been surveyed and their vitamin A values tabulated (4). Last but not least, authoritative estimates are at hand as to the quantitative requirements of children and adults for vitamin A (5). Such, in brief, are only a few of the important additions which have been made to our knowledge of this essential dietary factor. Today, students of nutrition favor the practice of "protective nutrition" in which the individual is maintained upon a diet calculated to supply all known dietary essentials—vitamin A included—in optimal amounts insofar as these amounts may be known. In specific instances, such dietaries must be supplemented by vitamin-rich materials. However, the prime consideration is to provide a properly formulated basic diet. In this connection, commercially canned foods are worthy of mention.

Modern canning procedures are practically without effect upon the vitamin A values of raw foods (3). The commercially canned varieties of foods prized for their vitamin A contents, therefore, lend themselves admirably to the formulation of protective diets. Not only because of their contributions of vitamin A, but also because of their ready availability, convenience and economy, these commercially canned foods provide one of the most valuable means whereby the American public may secure an optimal supply of the important dietary essential, vitamin A.

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1. 1938. J. A. M. A. 110, 1748.
2. 1938. Ibid. 111, 144.
1938. Ibid. 110, 2072.
3. 1938. Ibid. 111, 245.
4. 1937. U. S. D. A. Bur. of Home Econ., Misc. Pub. 275.
5. 1934-1935. Amer. Pub. Health Assn. Year Book 25, 69.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the forty-second in a series, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.



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Ecker, Ph.D., and L. Pillemer, Ph.D., with the assistance of Dr. J. J. Griffiths and Dr. W. B. Schwartz; "Nutritional Cataract and the Relation of Galactose to the Appearance of the Senile Suture Line in Rats", by R. E. Eckardt, B.S., and Dr. L. V. Johnson.

October 19—Pediatric Section. A number of interesting cases were presented by Dr. H. J. Gerstenberger and his staff.

October 26—Industrial Medicine and Orthopedic Section. "A Walking Iron for Immediate Use on Wet Plaster. Treatment of Humerus Shaft Fractures by Traction Cast", by Dr. Bernard B. Larsen; "Internal Fixation of Hip Fractures", with cases, by Dr. W. H. McGaw; "Presentation of Orthopedic Cases", Dr. G. I. Bauman, Dr. Rudolph S. Reich, and Dr. L. M. Starin. —Bulletin.

LORAIN

At a meeting of the Lorain County Medical Society, Tuesday afternoon, October 11, at the Elks' Cafe, Elyria, Dr. S. F. Basinger, Elyria, spoke on "The Public Control of Venereal Diseases".—L. H. Trufant, M.D., secretary.

Sixth District

(COUNCILOR: W. M. SKIPP, M.D., YOUNGSTOWN)

ASHLAND

A business meeting of the Ashland County Medical Society was held at the Hotel Otter, Ashland, Friday evening, October 14. Reports were made on the Legislative Conference held at Columbus, October 2, and present national developments along the line of socialized medicine were discussed.—M. D. Shilling, M.D., secretary.

MAHONING

Dr. Bradley M. Patten, University of Michigan, presented movies on "Embryology", at a meeting of the Mahoning County Medical Society, Tuesday, October 18, at Youngstown.

The society held a dinner-dance at the Youngstown Country Club, Saturday evening, October 22.—Bulletin.

PORTAGE

Dr. R. F. Thaw, Akron, spoke on "Otitis, Its Complications and Treatment", at a meeting of the Portage County Medical Society, Thursday evening, October 6, at the office of Dr. A. J. Silbiger, Atwater. The attitude of the American Medical Association and the Ohio State Medical Association on the trend toward federal control of medical practice was explained by Dr. Wm. M. Skipp, Youngstown, Councilor for the Sixth District.—E. J. Widdecombe, M.D., secretary.

WAYNE

Dr. John Mateer, Detroit, Michigan, was the speaker at a meeting of the Wayne County Medi-

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cal Society, Friday evening, September 23, at Wooster.—News clipping.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

COLUMBIANA

Opposition to proposed socialized medicine legislation was expressed by 75 physicians and dentists who attended a meeting of the Columbiana County Medical Society, Thursday evening, September 29, at Salem. Addresses were made by Dr. W. M. Skipp, Youngstown, Sixth District Councilor, and Dr. C. R. Larkins, East Liverpool. A resolution was adopted requesting The Council of the Ohio State Medical Association to change Columbiana County from the Seventh to the Sixth District.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

ATHENS

Dr. Myron D. Miller, Columbus, superintendent of the Franklin County Sanitarium, spoke on "The Modern Treatment of Tuberculosis", at a meeting of the Athens County Medical Society at the Christian Church, Nelsonville, Tuesday noon, September 13.—News clipping.

GUERNSEY

The Guernsey County Medical Society met in bi-monthly luncheon session, Thursday, September 15 at the Berwick Hotel, Dr. C. C. Headley gave an enlightening talk on "Syphilis of the Eye". At the October 6 meeting of the society Dr. C. A. Quimby, Wheeling, W. Va., gave an interesting paper on "X-Ray Therapy".—O. Reed Jones, M.D., correspondent for *The Journal.*

LICKING

Dr. Arthur C. Ernstene, Cleveland, spoke on "Drugs Used in Heart Disease", at a meeting of the Licking County Medical Society, Tuesday evening, September 27, at Hull Place, Newark. Plans were discussed for the Eighth District meeting in Granville, October 27.—News clipping.

MORGAN

Dr. R. W. Kissane, Columbus, was guest speaker at a meeting of the Morgan County Medical Society, Tuesday evening, September 20, at McConnelsville.—News clipping.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

SCIOTO

At a meeting of the Hempstead Academy of Medicine of Scioto County, Monday evening, October 10, at the General Hospital, Portsmouth, Dr. R. L. Crudgington, Cincinnati, spoke on "Obstetrics and Associated Endocrinology".—W. M. Singleton, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

CRAWFORD

Dr. Arthur W. Thomas, chief, Bureau of Child Hygiene, State Department of Health, was the speaker at a meeting of the Crawford County Medical Society, Monday evening, October 3, at the Elks' Home, Bucyrus.—O. R. Kackley, M.D., secretary.

FRANKLIN

The following programs were presented by the Columbus Academy of Medicine during October:

October 3—"Errors in Diagnosis of, and Treatment of, Heart Diseases", by Dr. Wilhelm Dressler, Vienna, Germany.

October 17—Symposium on Neurology in General Practice. "Important Anatomical Considerations", by Dr. Dwight M. Palmer; "Neurological Examination", by Dr. George T. Harding; "Interpretation of Signs and Symptoms", by Dr. Harrison S. Evans.

October 24—Section in General Medicine. "An Interesting Case Which Came to Autopsy", by Dr. Horace B. Davidson.—Bulletin.

CLASSIFIED ADVERTISEMENTS

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THE PHYSICIAN'S BOOKSHELF

Eat and Keep Fit. By Jacob Buckstein, M.D. $1.00. Emerson Books, New York, 1938; pp. 127.

A practical manual on dieting for better health and physical fitness by a well known gastro-enterologist, which can be heartily recommended for the purpose for which its author intended it.

Essentials of Obstetrical and Gynecological Pathology; With Clinical Correlation. By Marion Douglass, M.D., F.A.C.S., assistant professor of gynecology, Western Reserve University, and Robert L. Faulkner, M.D., senior clinical instructor in gynecology, Western Reserve University. $4.75. The C. V. Mosby Company, St. Louis, 1938; p. 187.

The authors are engaged in an attempt to compensate for lack of time spent in pathology by those taking special training in obstetrics and gynecology. This is being done by making instruction in pathology a constant and integral part of clinical training. In this book, they have put together the results of this teaching into a very readable and useful book for all who are interested in this special field of medicine.

The Truth About Childbirth. By Anthony M. Lucivici. $2.50. E. P. Dutton, New York, 1938; pp. 294.

This book attacks modern conditions in civilized countries that have brought on reaction against childbirth. It is the author's contention that childbirth can be a consciously pleasant experience. He maintains that it is in cases of normal motherhood, developed by a healthy life and correct diet when the birth of the first child is not deferred too long. The author is neither a woman or a physician, but he does furnish many stimulating thoughts for both.

Clinics on Secondary Gastro-Intestinal Disorders; Reciprocal Relationships. By Julius Friedenwald, M.D., Theodore H. Morrison, M.D., and Samuel Morrison, M.D., teachers of gastro-enterology in the University of Maryland, School of Medicine. $3.00. William Wood and Company, Baltimore, Md., 1938; pp. 251.

This book was written in a most instructive manner to remind us that digestive symptoms, organic or functional, do not necessarily originate alone from disease processes confined to the gastro-intestinal tract. This reciprocal relationship is discussed between the gastro-intes-

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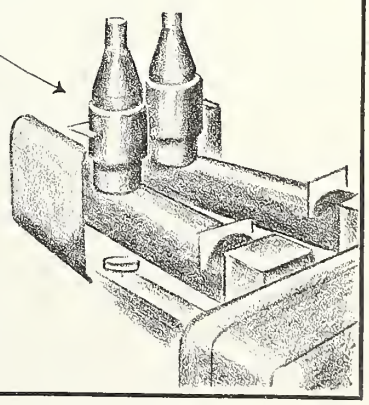
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Play and Mental Health. Principles and Practice for Teachers. By John Eisele Davis, senior physicial director, Veterans Administration Facility, Perry Point, Md. $2.50. A. S. Barnes, New York, 1938; pp. 202.

In this book the author presents the subject of play as usable material for the organization of effective mental hygiene practices in school, and to this end to develop a psychology of play in line with the spirit and recent advances of psychiatric practices in child education.

Love and Marriage. A Symposium. Edited by Dr. A. Forbath. $3.75. Liveright Publishing Corporation, New York, 1938; pp. 450.

This list of authors is the best recommendation for this worthwhile book: They are Havelock Ellis, Julian Huxley, S. Sorensen, F. Vidol, Elizabeth Sloan Chesser, P. Orlovcki, Wilhelm Stekel, A. Forbath, Paul Gartnes, W. Foeroter, H. Rohleder.

Syphilis, Gonorrhea and The Public Health. By Nels A. Nelson, B.S., M.D., F.A.P.H.A., director of genito-infectious diseases, Massachusetts Department of Public Health, and Gladys L. Crain, R.N., epidemiologist of genito-infectious diseases, $3.00. The Macmillan Company, New York, 1938; pp. 359.

This book presents not only the essential known facts concerning syphilis and gonorrhea, but also gives an account of the development of control to date and discusses the direction which they are taking. These three contributions make the book highly valuable to every physician at this time.

Life Along the Passaic River. By Wm. Carlos Williams. $1.75. New Directions Press, Norfolk, Conn., 1938; pp. 201.

A practitioner of medicine in a typical Eastern suburban and industrial town, presents a collection of nineteen short shorts from our own viewpoint. His characters are typical Americans and his sketches are memorable. Every physician will enjoy the stories.

White Mule. By William Carlos Williams. $2.50. New Directions Press, Norfolk, Conn., 1937; pp. 293.

This is the story of a plain American family of immigrant origin in pre-war New York, by that excellent physician-author, William Carlos Williams. It is an excellent story—a real piece of fiction. To us it is descriptive of real Amer-

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During the past three years, more than seventy original articles dealing with the uses of 'Benzedrine Sulfate Tablets' (amphetamine sulfate, S.K.F.) have appeared in medical and scientific publications.

The following would seem to be of especial interest at this time.

NARCOLEPSY

ULRICH, H.: Narcolepsy and Its Treatment with Benzedrine Sulfate—New Eng. J. Med., 217:696, 1937.

GASTRO-INTESTINAL EFFECTS

MYERSON, A. and RITVO, M.: Benzedrine Sulfate and Its Value in Spasm of the Gastro-Intestinal Tract—J.A.M.A., 107:24, 1936.

POST-ENCEPHALITIC PARKINSONISM

DAVIS, P. L. and STEWART, W. B.: The Use of Benzedrine Sulfate in Post-Encephalitic Parkinsonism—J.A.M.A., 110:1890, 1938.

DEPRESSION

WILBUR, D. L.; MACLEAN, A. R. and ALLEN, E. V.: Clinical Observations on the Effect of Benzedrine Sulphate—J.A.M.A., 109:549, 1937.

WOOLLEY, L. F.: The Clinical Effects of Benzedrine Sulphate in Mental Patients with Retarded Activity—Psych. Quart., 12:66, 1938.

MISCELLANEOUS

REIFENSTEIN, E. C., JR. and DAVIDOFF, E.: The Treatment of Alcoholic Psychoses with Benzedrine Sulfate—J.A.M.A., 110:1811, 1938.

HILL, J.: Benzedrine in Seasickness—Brit. Med. Jour., ii:1109, 1937.

LESSES, M. F. and MYERSON, A.: Human Autonomic Pharmacology. XVI. Benzedrine Sulfate as an Aid in the Treatment of Obesity—New Eng. J. Med., 218:119, 1938.

Present Status of Benzedrine Sulfate — Report of the Council on Pharmacy and Chemistry — J.A.M.A., 109:2064, 1937.

Each 'Benzedrine Sulfate Tablet' contains amphetamine sulfate, 10 mg. (approximately 1/6 gr.)

The Council on Pharmacy and Chemistry of the A.M.A. has adopted amphetamine as the descriptive name for α-methylphenethylamine, the substance formerly known as benzyl methyl carbinamine. 'Benzedrine' is S.K.F.'s trademark for their brand of amphetamine.

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icanism, and in these days when Americans have forsaken these things for strange, and we believe false, gods, it is well to stop and try to recall for what it was that the United States of America stood.

Claude Bernard, Physiologist. By J. M. D. Olmsted, professor of physiology, University of California. $4.00. Harper and Brother, New York, 1938; pp. 272.

This book is an excellent critical study of a warm, human personality who became one of the greatest physiologists who ever lived and thus father of modern medicine.

Death Wears a White Coat. By Theodore DuBois. $2.00. Houghton Mifflin Company, Boston, Mass., 1938; pp. 239.

This mystery story of what may be a murder or anaphylactic death is a good piece of detective fiction.

Materia Medica. Drug Administration and Prescription Writing. By Oscar W. Bethea, M.D., professor of clinical medicine, Tulane University School of Medicine, Fifth Revised Edition. F. A. Davis Company, Philadelphia, 1938; pp. 577.

This well known text has been extensively rewritten and conforms to the XI Edition of the Pharmacopoeia. The great number of reprintings and the five editions through which this book has passed recommend it better than I can. This edition will be found more useful to the practitioner because it contains much more material about the use of drugs.

Genealogy of Sex. By Curt Thesing, M. D. $2.95. Emerson Books, Inc., New York, 1937; pp. 283.

The sub-title of Sex in its myriad forms from the one-celled animal to the human being explains the content of this informative book. Written by an authority on Zoology, it is never dry but is most interesting throughout.

A Synopsis of the Diagnosis of the Acute Surgical Diseases of the Abdomen. By John A. Hardy, B.Sc., M.D., F.A.C.S., El Paso, Texas. $4.50. The C. V. Mosby Company, St. Louis, Mo., 1938; pp. 345.

Forty-one chapters, each devoted to one of the major acute problems of the abdomen requiring surgical management if recognized makes this little pocket manual of great help in recalling instantly the finer and more abstruse points of abdominal diagnostic procedures. The author has done a splendid job.

The Vitamins and Their Clinical Application. By Prof. W. Stepp, Docent Kuhnau, Dr. H. Schroeder and H. A. H. Bouman, M.D., translator. $4.50. The Wisconsin Cueno Press, Inc.; pp. 173.

This enlightening and intensely practical manual on vitamins has recently been trans-

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lated by H. A. H. Bouman, M.D., of Minneapolis, Minnesota, and should be of interest to every physician who wants to understand the use of vitamins in his daily practice. The manual takes up each of the known vitamins separately, giving its history, chemistry, determination, occurrence, manifestations, absorption, clinical application, physiology, preparation and dosage, and an extensive bibliography. Included is a chart of the survey of vitamins known today and a chart showing contents of essential vitamins in various diets. This book is available from the Vitamin Products Company of Milwaukee, Wisconsin.

And the Stutterer Talked. By A. H. Kanter, M.D. and A. S. Kohn, B.A., Columbus, Ohio. $2.00. Bruce Humphries, New York, 1938; pp. 236.

One of our fellow members, in collaboration with his associate, has presented in the form of well-written biography, the conclusions of their researches which prove that stuttering is not primarily a speech defect but a neuro-pathological disturbance best corrected by the complete rehabilitation of the afflicted. It is an excellent book for physicians, teachers, and the parents of these unfortunate victims.

Toxicology. By William D. McNalley, M.D., lecturer in toxicology, Rush Medical College, Chicago. $10.00. Industrial Medicine, Beloit, Wisconsin. 1937; pp. 1,021.

This is an authoritative treatise upon this subject, remarkably free of out-moded observations. It is fresh, up-to-date and complete. To all who contact industrial medicine, it is an essential book.

The Harvey Lectures. Series XXXIII, $4.00. Williams and Wilkins, Baltimore, Md., 1938; pp. 275.

The standard of previous series has been maintained throughout this one. The lecturers this year need no introduction or comment. They are: Dr. Selig Hecht, Dr. Einar Lundsgaard, Dr. Cecil K. Orinker, Dr. John P. Peters, Dr. Philip Bard, Dr. Wendell M. Stanley, Dr. F. C. Koch, and our own member, Dr. Harry Goldblatt.

A Marriage Manual. A Practical Guide-Book to Sex and Marriage. By Hannah Stone, M.D., medical director of birth control clinical research bureau and the marriage consultation center at the Community Church and Labor Temple, New York, and Abraham Stone, M.D., associate attending urologist at the Syndenham Hospital and co-director of marriage consultation center at the Community Church and Labor Temple. Eighth printing. $2.50. Simon and Schuster, New York, 1937; pp. 334.

This is completely specific and, in the form of questions and answers, presents what over 10,000 interviews have taught the authors that the average person wants to know. A really excellent manual.

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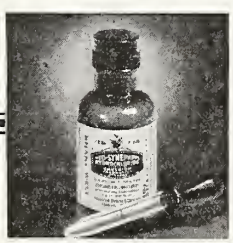
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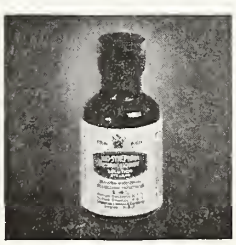
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Northwestern Ohio Meeting Attended by More Than 200; Excellent Program

Attracted by an unusually fine program, over 200 physicians attended one of the most successful meetings in the history of the Northwestern Ohio Medical Association, at the High School, Defiance, Tuesday, Otcober 4.

Interesting papers were presented throughout the day, beginning with Dr. Albert D. Frost, Columbus, at 9:00 A.M., and ending with the address made by Dr. Emil Novak, Baltimore, Md., at 8:30 P.M.

Other speakers were: Dr. Harold N. Cole, Cleveland; Dr. Claire L. Straith, Detroit, Mich.; Dr. Fred L. Strickroot, Detroit, Mich.; Dr. Frederick H. Falls, Chicago, Ill.; Dr. W. Halsey Baker, Baltimore, Md.; Dr. Lowell D. Snorf, Chicago, Ill.; Dr. Roy W. Scott, Cleveland; Dr. Henry W. Meyerding, Rochester, Minn.; Dr. Wingate M. Johnson, Winston-Salem, N. C.; Dr. A. A. Brill, New York.

The meeting was attended by Dr. Barney J. Hein, Toledo, President of the Ohio State Medical Association, who explained the activities of the Sub-Committee on Legislation of the State Association, and urged the physicians to support candidates in the November election who have expressed sound views on medical and public health questions.

Dr. Edward B. Pedlow, Lima, president of the Northwestern Ohio Medical Association, presided at the morning and afternoon sessions. Dr. D. J. Slosser, secretary of the association, who arranged the excellent program, was the presiding officer at the evening meeting.

Van Wert was selected as the meeting place in 1939, and the following new officers were elected: Dr. W. D. Hickey, Leipsic, president; Dr. D. B. Spitler, Hoytville, vice-president; Dr. F. G. Maurer, Lima, secretary; and Dr. C. B. Geiger, Holgate, treasurer.

Twenty-six physicians played in the golf tournament at the Kettenring Golf Course, Defiance, Monday, October 3. The following won trophies: Dr. John J. Harrison, Napoleon, low net; Dr. J. B. Sampsell, Van Wert, senior; and Dr. H. A. Thomas, Lima, handicap.

Dr. Crotti Honored

Dr. Andre Crotti, Columbus, was elected international president of the International College of Surgeons at the second annual assembly of the United States Chapter held in Philadelphia recently. Dr. Fred M. Douglass, Toledo, was elected president of the U. S. chapter.

Cleveland—Dr. Russell L. Haden, spoke on "Focal Infection" at a meeting of the Cleveland Dental Society, October 3. Dr. V. C. Rowland was a discussant.

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IF YOU WOULD LIKE COPIES of reprints listed below, check those you wish, tear off this part of the page, and mail to PHILIP MORRIS & CO., LTD., INC., 119 Fifth Avenue, New York... Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245 ☐ N. Y. State Jour. Med., 1935, 35-No. 11, 590 ☐ Laryngoscope, 1935, XLV, 149-154 ☐ Laryngoscope 1937, XLVII, 58-60 ☐

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Canton Postgraduate Day a Big Success; 325 in Attendance

Three hundred and twenty-five physicians attended the First Annual Postgraduate Day of the Stark County Medical Society, held at the Courtland Hotel, Canton, Wednesday, October 12.

The program was presented by the following members of the faculty of the University of Pennsylvania School of Medicine, Philadelphia: Dr. Baldwin Lucke, professor of pathology; Dr. T. Grier Miller, professor of clinical medicine; Dr. I. S. Ravdin, professor of surgery; and Dr. Francis C. Grant, professor of neurosurgery. Sessions were held in the afternoon and evening.

At the dinner, Mayor Seccombe welcomed the physicians on behalf of the city of Canton, and Russell J. Burt brought the greetings of the Canton Chamber of Commerce. On a half-hour radio broadcast at 6:00 P. M., Dr. Ravdin spoke on "The Contribution of the Surgeon to Public Health", and Dr. Miller discussed "Indigestion".

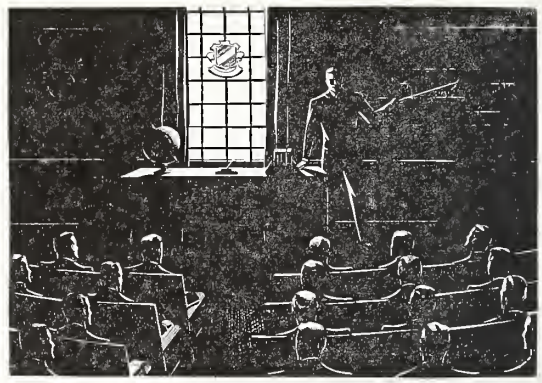
Most Stark County physicians attended the session and guests came from Pennsylvania, Toledo, Columbus, Akron, Youngstown, Mansfield, Salineville and many other places. Because of the highly successful meeting it was decided to make the postgraduate day an annual event.

The committee in charge included the following: Dr. J. Edwin Purdy, chairman; Dr. Frank Van Dyke, Dr. O. R. Clovis, Dr. L. A. Buchman, Dr. R. K. Ramsayer, Dr. John M. Van Dyke, Dr. F. R. Bennett, Dr. M. E. Scott, Dr. H. J. Schwensen, Dr. J. S. Wilson, Dr. Howard B. Weaver, Dr. J. J. South, Dr. L. E. Anderson, Dr. A. W. McConkey, Dr. A. R. Olmstead, Dr. J. E. King, Dr. George L. King, Dr. James A. McNally, Dr. Glenn Zeiders and Dr. V. Z. Garster.

Industrial Eye Hazard Data Sought

The National Society for the Prevention of Blindness has issued a public call for (1) information concerning new industrial or occupational eye hazards—both accident and disease hazards; (2) recent and significant statistics concerning any occupational hazards to sight—showing frequency, severity, causes, nature of injury, degree of impairment, cost, etc.; (3) photographs showing either hazards to sight or protection against such hazards, and (4) information concerning successful methods of eliminating, counteracting or alleviating the disease and accident hazards to eyes.

This information is desired for consideration in the revision of the handbook "Eye Hazards in Industrial Occupations". Due credit will be given for all photographs, statistics or other information used. The Society's headquarters are at 50 West 50th Street, New York City.



EDUCATION

Physicians who teach correct bowel management to their patients will appreciate the value of the new "Habit Time" booklet as a means of impressing patients with the importance of bowel regularity.

"Habit Time," written for doctors' patients in a clear, interesting style, embraces a discussion on diet, exercise and bowel regularity, in addition to a simple explanation of the functions of digestion.

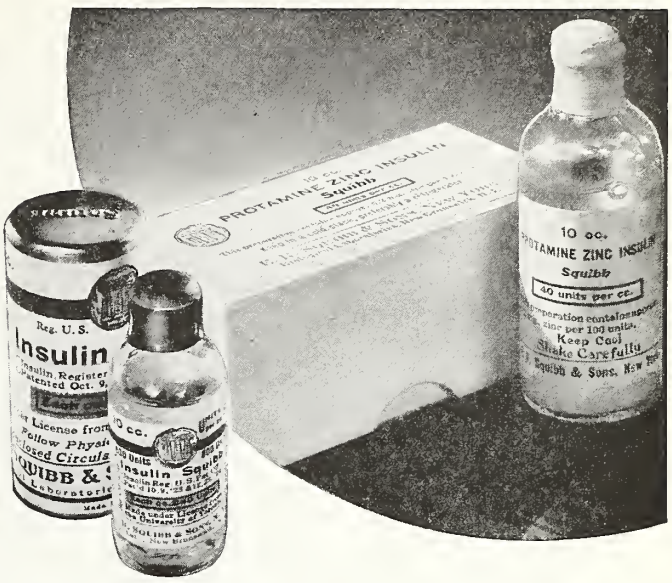
"Habit Time," illustrated by Tom Jones, celebrated anatomical artist, has been reviewed and found satisfactory by the Council on Pharmacy and Chemistry of the American Medical Association. It is offered, free, by Petrolagar as an aid to doctors.

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NEWS NOTES

Akron—Dr. L. I. Thomas has been appointed chief of the city's venereal disease clinic, succeeding Dr. Harold J. Gordon, who resigned to return to private practice.

Celina—Dr. Chas. C. Henrie should be added to the list of Ohio's physician-aviators. He flies a Taylor Cub monocoupe.

Cincinnati—"Modern Society's Health Program", was the subject of a campus lecture by Dr. Alfred Friedlander, Dean of the University of Cincinnati College of Medicine, recently, inaugurating the 1938-39 lecture series under the auspices of the University of Cincinnati branch of the American Institute of Chemical Engineers.

Cleveland—Dr. H. C. Stewart, Nashville, Tenn., has been appointed tuberclosis coordinator for the six health districts of Cyahoga County. Dr. Stewart's work will be financed by the Anti-Tuberculosis League of Cleveland and Cuyahoga County.

Columbus—Dr. and Mrs. W. D. Murphy are convalescing from serious injuries sustained in a recent automobile accident.

Dorset—Dr. J. L. Hurst has been reappointed health commissioner of Ashtabula County.

Felicity—Dr. C. F. Barber was injured in an automobile accident near Wilmington recently.

Fremont—Dr. Murray E. Goodrich, Toledo, has been appointed roentgenologist at Memorial Hospital.

Garrettsville—"What is New in Medicine", was the subject of a talk made by Dr. Myron W. Thomas at a recent meeting of the Rotary Club.

Lancaster—Dr. W. R. Coleman has been reappointed health commissioner of Fairfield County.

Mansfield—Dr. Walter L. Merz, Hamtramck, Michigan, has been appointed assistant city-county health commissioner at Mansfield.

Wooster—Dr. Robert N. Wright and Dr. Ward A. Fritz have purchased City Hospital from Dr. Harry J. Stoll.

Youngstown—Dr. William H. Bunn is president of the Central Society for Clinical Research which will hold its annual meeting in Chicago, November 4-5.

Zanesville—The following staff officers of local hospitals were reelected at the recent annual elections: Bethesda Hospital—Dr. Edmund R. Brush, chief; Dr. G. B. Trout, vice-president, and Dr. P. H. Elliott, secretary. Good Samaritan Hospital—Dr. Ward D. Coffman, chief; Dr. Charles J. Roach, vice-president, and Dr. R. S. Martin, secretary.

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Vol. 34 DECEMBER, 1938 No. 12

SOME SURGICAL PRINCIPLES IN THE CARE OF INFECTIONS OF THE HAND

By SUMNER L. KOCH, M.D., CHICAGO, ILLINOIS

INFECTIONS are like the poor, and the problem of relief—always with us. Our interest in them waxes with the introduction of each new method of chemotherapy, and often wanes with the gradual realization that successful treatment does not consist simply in the administration of some new drug three times a day, or the daily injection of a new and widely advertised pharmaceutical product. If we would treat infections successfully we must still adhere to well recognized surgical principles, many of them as old as surgery itself, and many of them disregarded from time to time in the unsuccessful effort to find a short cut—a royal road, as it were, to successful treatment.

Whether an infection involves the hand or some other part of the body we must ask ourselves several questions:

1. Is the infection an acute spreading process or is it localized?
2. What tissues and structures are involved?
3. How can an infection involving these tissues be drained efficiently, and with minimum risk of injury?
4. What should be done after drainage has been secured?
5. What is the type of infection present? What organisms are responsible?

Read before the Fourth General Session, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, May 11 and 12, 1938.

The Author

• Dr. Koch is a graduate of Northwestern University Medical School, 1914; member American Surgical Association, Society of Clinical Surgery, Western Surgical Association; fellow American College of Surgeons; attending surgeon, Passavant Memorial and Cook County Hospitals, Chicago; associate professor of surgery, Northwestern University Medical School, Chicago.

IS THE INFECTION AN ACUTE SPREADING PROCESS OR IS IT LOCALIZED?

If the infection is an acute rapidly spreading process it demands conservative treatment in so far as surgical intervention is concerned. To cut into an area of intense inflammation and cellulitis before nature has had sufficient time to wall off the infectious process is one of the common errors into which we are likely to fall. In case of doubt it is wise to err on the side of conservatism and aid nature in localizing the infection, by the application of large, warm, wet sterile dressings, until there is no doubt that the spreading infection has localized and that an abscess is present. Many lives have been lost by the premature incision of tissues involved in an acute spreading infection. On the other hand, if the

infection is localized the exact site of localization should be recognized, and incised in such a way as to give maximum drainage with minimum risk of injury to important anatomical structures and minimum risk of subsequent loss of function.

WHAT TISSUES AND STRUCTURES ARE INVOLVED?

In no part of the body is this question more important than in the hand. A paronychia, a



Fig. 1. Superficial infection of palm, under palmar fascia but superficial to flexor tendons, resulting from a penetrating wound. The infection does not involve tendon sheaths or middle palmar space.

felon, a subcuticular infection, a collar button abscess, a subfascial infection, a tendon sheath infection, an abscess of fascial spaces of palm or forearm, all have definite clinical signs and symptoms. For each there is one best method of surgical approach. With each one there is risk of converting the simple single condition into a more extensive and more complicated one by careless or unthinking treatment. The signs and symptoms of the different types of infection mentioned are so clearly set forth in Kanavel's monograph on Infections of the Hand and in modern



Fig. 2. Collar button abscess beginning under callus at base of ring finger. Pus is spreading to either side and into the soft tissues of the web between ring and little fingers. There is diffuse and marked swelling of the dorsum of the hand because of the laxness of the dorsal tissue and the direction of lymph drainings.

textbooks of surgery that it would be both presumptuous and wasteful of good printer's ink to repeat them here. An exact knowledge of those signs and symptoms and of their surgical treatment is an essential part of the equipment of the efficient surgeon.

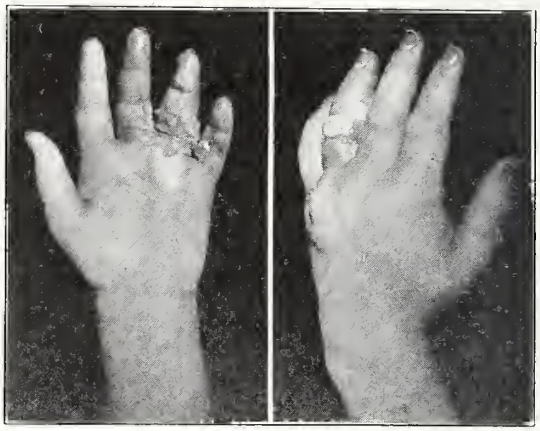


Fig. 3. Tendon sheath infection of ring finger with rupture into middle palmar space. The entire ring finger is involved, the concavity of the palm is disappearing and the dorsam of the hand is diffusely swollen.

HOW CAN AN INFECTION INVOLVING THESE TISSUES BE DRAINED EFFICIENTLY, AND WITH MINIMUM RISK OF INJURY?

In the actual performance of operation for infection there are certain details that are of great importance, no matter what the site of infection.

1. The use of a general anesthetic to eliminate the danger of adding injury to tissues with resistance already diminished.

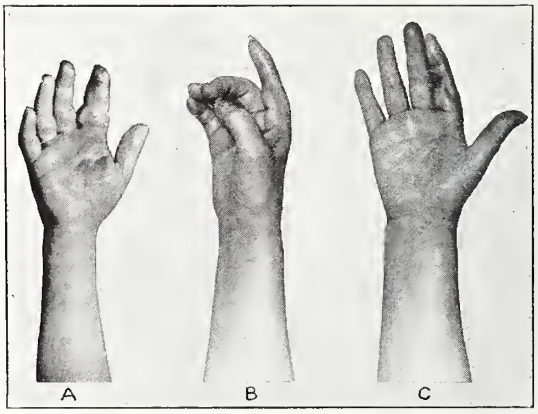


Fig. 4. Acute spreading infection which followed a pin prick of the tip of the index finger, which extended rapidly upward to involve hand, forearm and arm, gradually receded, and eventually localized in the flexor tendon sheath of the index finger and thenar space.
a. After localization, just before operation.
b, c. Results 6 months later. In spite of every effort the flexor tendons of the index finger were destroyed.

2. Gentle preparation of the field of operation with soap and water so as to eliminate the injurious effect of powerful chemical antiseptics upon inflamed tissues.

3. The use of a bloodless field, obtained with the aid of a blood pressure cuff inflated to 250 mm., so that one can visualize the field of opera-

tion clearly, and make certain both of avoiding injury of nerves, blood vessels and uninvolved tendon sheaths, and of securing adequate drainage of the infected area.

4. Accurately placed incisions that permit adequate drainage, and that eventually result in minimum contracture and deformity.

WHAT CONSTITUTES ADEQUATE POSTOPERATIVE CARE?

After drainage has been accomplished there are still important factors that must be kept in mind if satisfactory results are to be obtained:

1. Rest of the affected part secured with the aid of splints.

2. Application of continuous warm wet dressings only until the infection has been brought under control, and not continued to the stage of intense congestion and maceration of superficial tissues.

3. Continued cleanly surgical care to prevent access of further infection.

4. Constant attention to the position of function and particularly toward preventing fixation of the constantly immobilized hand in pronation, and of the thumb and fingers in complete extension.

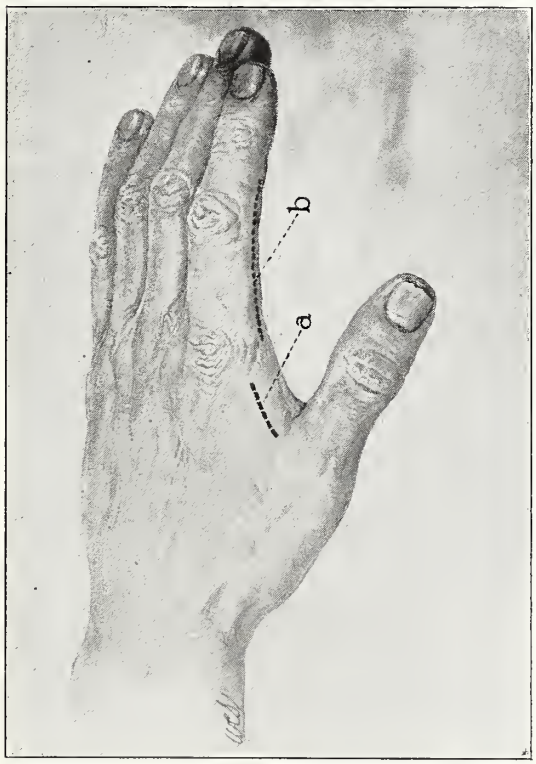


Fig. 5. Incision for drainage of thenar space, a; and flexor tendon sheath of index finger, b.

WHAT IS THE TYPE OF INFECTION PRESENT? WHAT ORGANISMS ARE RESPONSIBLE?

More frequently as time goes on it seems as though nature tries "to make the riddle harder" by adding to wounds new strains and new combinations of bacteria which do not behave like simple, unmixed pyogenic infections. The combination of a syphilitic infection with an acute

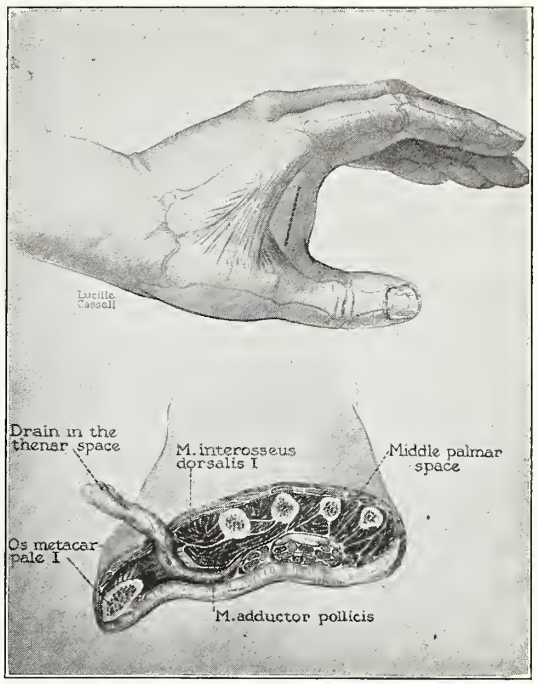


Fig. 6. Anatomical dissection to show the position of the thenar space, and the direct access afforded by the incision indicated (after Kanavel).

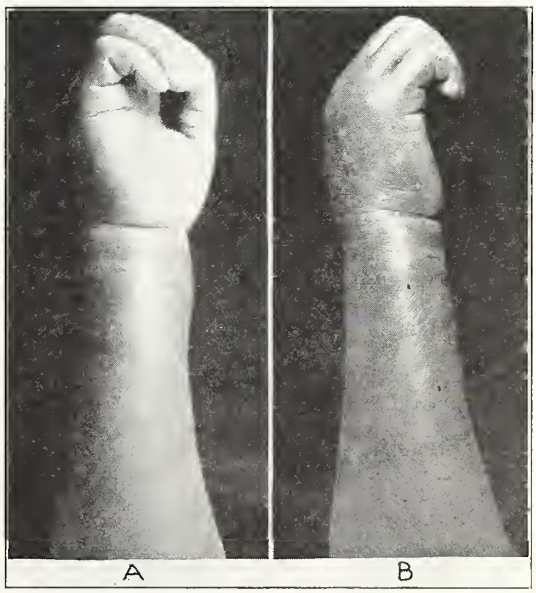


Fig. 7. Diffuse infection following trivial injury of volar surface of distal phalanx of thumb. The infection has extended proximalward along the tendon sheath of the flexor pollicis longus, along the radial bursa into the forearm, across to the ulnar bursa and distalward along the flexor tendon sheath of the little finger. The flexed position of the fingers, the diffuse swelling of the hand, and the tense swelling of the lower forearm are characteristic symptoms. a, b. Before operation.

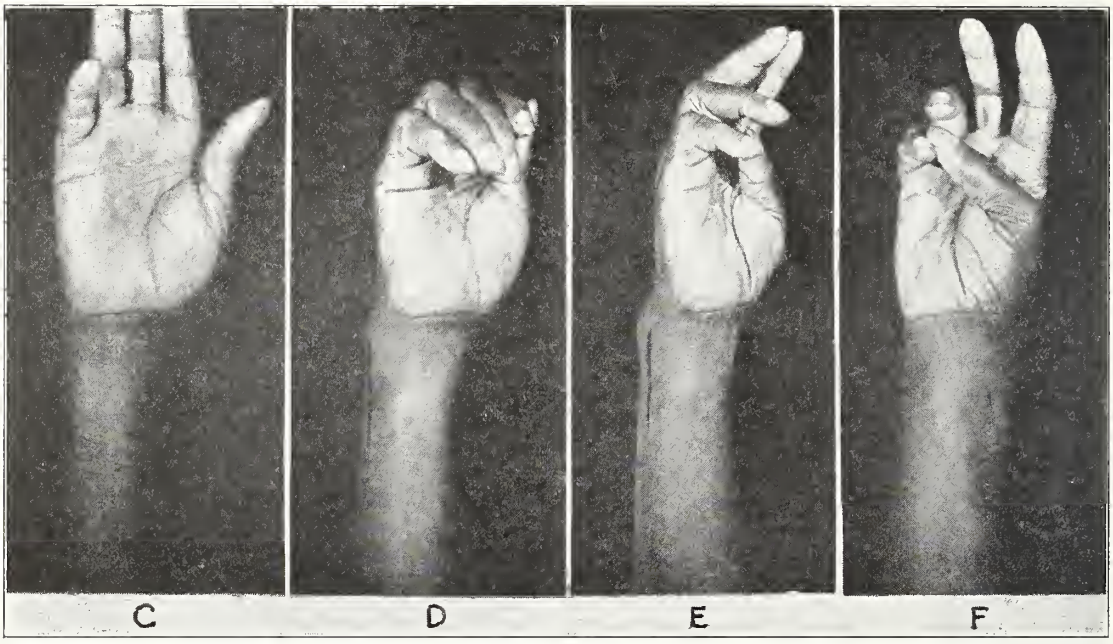


Fig. 7. c, d, e, f. Result 6 months later. The tendons have been saved and a considerable degree of restoration of function has taken place.

pyogenic infection is not common, but occurs often enough to cause consternation and dismay to physician and patient—usually a medical man.

The mixed infections which result from fist fights and human bites are notoriously difficult to treat, once they gain a foothold, both because of their location, often in and about a joint cavity, because of their necrotizing action on the body tissues, and because of the constant presence of a number of different strains of aerobes and anaerobes acting in symbiosis.

The micro-aerophilic streptococcus of Meleney with its tendency to persistent undermining of skin and subcutaneous tissue, to formation of sinuses to secondary involvement of lymph glands and to secondary abscess formation has been recognized with increasing frequency in recent years. The persistence of grayish purulent wound secretion, the continual undermining of wound edges, often recurring just when one is certain that the infection is under control, and the constant finding of a hemolytic streptococcus which grows abundantly **under anaerobic conditions** are the characteristic findings in this type of infection as we have seen it in the hand. Meleney's interesting case, described and pictured as case 3 in his paper in Surgery of February, 1937, is a striking example of an advanced infection of this type.

Tularemia is not often overlooked, but, like syphilis, can be masked for a time by the presence of an acute pyogenic infection and so remain unsuspected for a considerable period.

"Gas gangrene" is uncommon as a result of infection of the hand in civil life, but the presence of a thin blood stained and foul smelling wound secretion following a penetrating wound of the muscle tissue of the hand, and a coppery or greenish-yellow discoloration of the skin about the wound should always suggest the possibility of infection with the organisms of gas gangrene and the necessity for immediate bacteriologic examination.

"Forewarned is forearmed," and the surgeon who keeps constantly in mind the possibility of unusual infections and does not delay in securing both anaerobic and aerobic cultures and in making serological tests when an infection presents unusual symptoms or is unduly persistent does both himself and his patient a service.

54 E. ERIE STREET.

Activities of Disease by Trauma

I have never known an initiating trauma to be the cause of such varied maladies as appendicitis, apoplexy, brain tumor, cancer, diabetes, gastrointestinal ulcer or pulmonary tuberculosis. If the relationship existed, assuredly it would be better known to those who are daily in contact with the injured rather than to those who only occasionally encounter this class of patient. It can be confidently asserted that the voice of experience is loud in proclaiming that any relationship is exceptional, coincidental, and doubtful.—John J. Moorhead, M.D., New York City; N. Y. State Jour. of Med. Vol. 38, No. 20, Oct. 15, 1938.

OSTEOMYELITIS: DIAGNOSIS AND TREATMENT

By GEORGE I. BAUMAN, M.D., Cleveland, Ohio

OSTEOMYELITIS is a blood-borne infection of bone caused by some variety of staphylococcus or streptococcus. The portal of entry is an infected wound or blister, a boil or abscess, infected teeth, sore throat, or infection in the urinary tract. The infecting organism may occasionally be isolated in blood culture.

DIAGNOSIS

In the acute stage the patient is seriously ill, with high fever, prostration, chills and all signs of a severe blood-stream infection. The extremity is very painful especially on palpation or motion. In the early hours of infection, before the abscess has broken through the cortex, there are no external signs such as redness or swelling in the soft parts, nor swelling, tenderness, heat or extreme pain on motion in the neighboring joint. Careful palpation will always reveal an area of acute tenderness in the metaphyseal region of one of the long bones, e. g., near the upper or lower end of the humerus, femur or tibia. The finding of such an area of acute bone tenderness near the joint distinguishes acute metaphysitis or osteomyelitis from acute rheumatic fever, in which the joint itself is definitely the seat of the trouble. The erroneous diagnosis of acute rheumatic fever so often made in these cases renders impossible the institution of early effective surgical treatment.

The course of the infection is well illustrated in Fig. 1, taken from Hart's article.[1] This sketch illustrates the reason for referring to the condition as "acute metaphysitis". From its initial point in the metaphysis the abscess travels outward through the cortex and subperiosteally into the joint or along the diaphysis. More than one long bone may be the seat of such a focus. The metaphysis at the epiphyseal plate is soon entirely surrounded by the abscess, the infection, in some cases, extending along the entire shaft. This fact justifies the early incision of the metaphyseal abscess to limit its extension or, in later cases, the removal of the entire section of bone as far as it is infected. The course of the spread of infection is dependent upon the point of insertion of the joint capsule and periosteum. This explains the frequent involvement of the hip joint in infections of the upper end of the femur. The infection also extends into the neighboring joint more readily in infants than in older children, accounting for the frequency of acute pyogenic arthritis in infants. The epiphysis is seldom primarily involved. However, the infection may cross the epiphyseal disc destroying certain areas in the epiphysis, and even enter the joint through the epiphysis, as we have frequently seen after perfoming a diaphyseal resection. A knowledge of the exact location of the metaphyseal abscess and its rapid progress is essential for the early diagnosis of acute metaphysitis or osteomyelitis. No time should be wasted in

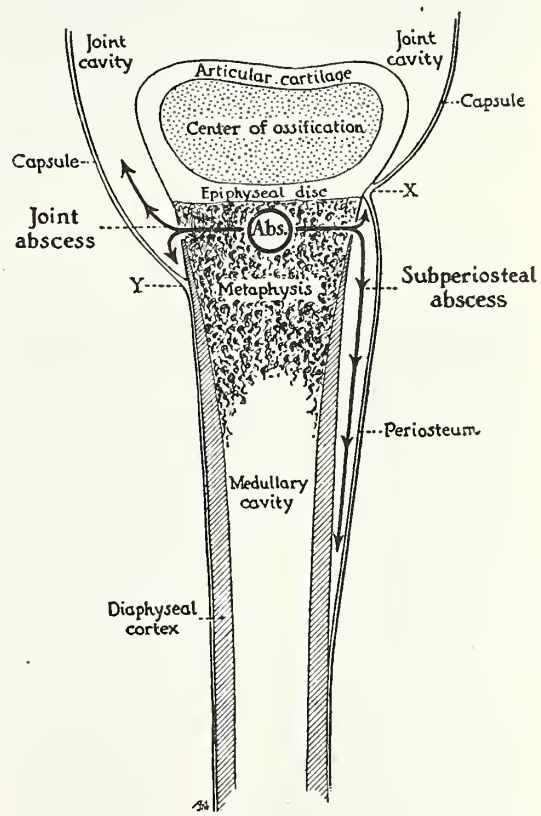


Fig. 1. Diagram illustrating the usual course of spread of infection in acute hematogenous osteomyelitis or metaphysitis, used through the courtesy of Dr. Vernon L. Hart[1]. X represents the point of firm attachment of capsule and periosteum in the region of the epiphyseal disk when the metaphysis is extracapsular. Y is the fixation point of capsule and periosteum when the metaphysis is intracapsular.

The Author

• Dr. Bauman is a graduate of Western Reserve University School of Medicine, 1903; member Clinical Orthopedic Society, American Academy of Orthopedic Surgeons; visiting orthopedic surgeon to St. John's, St. Luke's, St. Ann's, and City Hospitals, and Fairview Park Hospital; assistant clinical professor of orthopedic surgery, Western Reserve University School of Medicine.

Read before the Section on Surgery, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

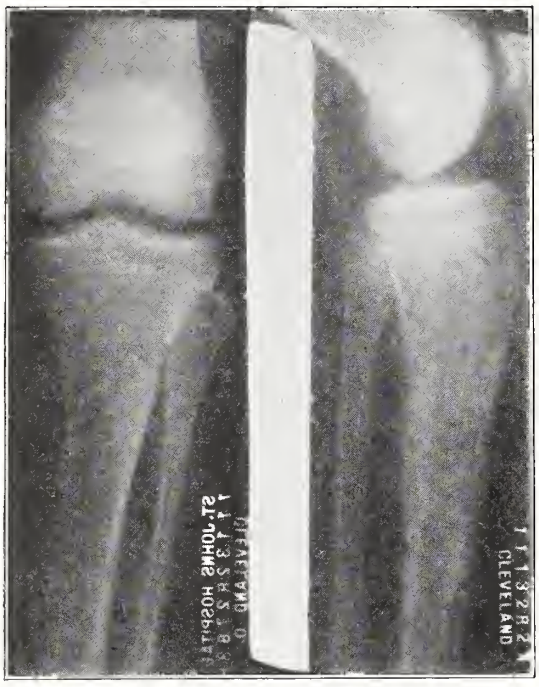


Fig. 2. H. K. Diffuse osteomyelitis upper half of tibia before resection.

X-rays in this stage as they are entirely negative.

TREATMENT

Prompt incision or drilling into the metaphyseal abscess will greatly limit the amount of subsequent bone destruction and the spreading of the infection to other bones. If the abscess has burrowed under or through the periosteum, dependent or through and through drainage should be established. More radical surgical treatment is seldom necessary or desirable in the acute stage. The abscess cavity should be filled with melted vaseline, the wound closed and the extremity, including the joint above and below, immobilized in plaster. A window should be cut in the cast to facilitate dressing the wound. Dressings should be of the simplest and done at long intervals. In cases of acute pyogenic arthritis the joint should be thoroughly lavaged with a hot mild antiseptic solution and closed under aseptic technique. This might be termed the radical-conservative treatment of acute oseomyelitis and acute pyogenic arthritis.



Fig. 3. M. G. Ten years after subperiosteal resection of practically the entire diaphysis of tibia. There was some destruction in the lower epiphysis and pyogenic arthritis of ankle resulting in ankylosis between astragalus and tibia. Growth has been equal in tibia and fibula. The moderate equinus position of the foot compensates for ¾" shortening. No limp.

Following subsidence of the acute symptoms, a careful X-ray study should be made of the involved bones. This will usually reveal a diffuse or a circumscribed type of destruction. That part of the shaft which has been surrounded by the periosteal abscess becomes a sequestrum which may be broken up and discharged in small pieces or may remain intact for months or years. The presence of a part of the originally infected diaphysis is sufficient cause of persistence of drainage, of continued toxemia, of the formation of new abscesses and sinuses, or of the reopening of wounds thought to be permanently healed. If such a condition exists about a joint, especially the hip, an erroneous diagnosis of tuberculosis is frequently made. As the treatment of the two conditions is so different a diagnosis of tuberculosis should stand only after proper laboratory proof.

CHRONIC OSTEOMYELITIS

The best technique to follow in the treatment of chronic osteomyelitis depends upon the exact amount and character of bone destruction, the stage of such destruction and bone repair, the bone involved, joint involvement, age of the patient, and to some extent upon the convictions of the surgeon. One fundamental should be stressed; all diseased old bone should be removed, all new bone possible should be saved. In our experience this is best accomplished by a subperiosteal resection performed at the time of greatest activity in new bone formation (Figs. 2 and 3). A tourniquet is applied, and the shaft exposed through a long incision over its most superficial surface. The periosteum together with all new bone is incised and retracted as far as it is thickened and loose, or as far as the periosteal reaction shows in the X-rays. The shaft is completely divided at this point with chisel or Gigli saw, the end retracted from the wound, the remainder of the periosteum and new bone stripped off, and the shaft broken off or cut near the epiphyseal plate. Any pockets extending into

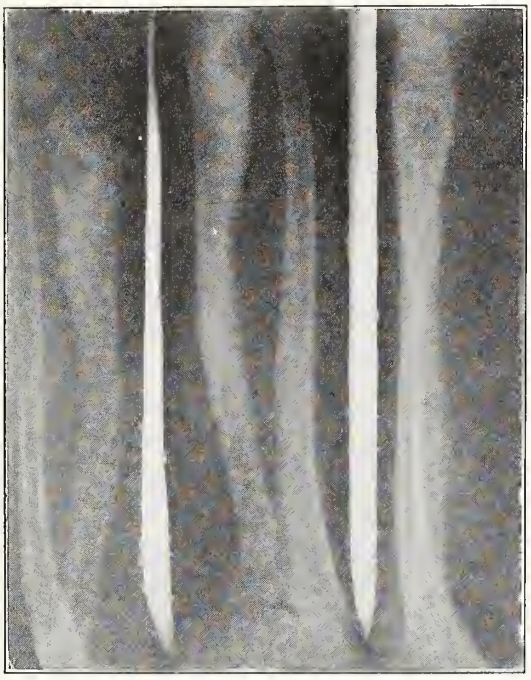


Fig. 4. H. K Localized osteomyelitis in lower end of radius.

the epiphysis are curetted. The periosteum is then closed over a long perforated drainage tube of suitable size and preferably divided in the middle to facilitate subsequent removal. The incision is closed except at the ends. The operation is quickly done, with little hemorrhage or shock.

The cavity is kept clean by irrigation through the tube. Dressings are greatly simplified. The part is immobilized in splint or cast. The tube is gently removed as soon as the infection has cleared up. If little pus is encountered in the operation, or if the bone cavity is small, it may be filled with melted vaseline and entirely closed (Fig. 4).

Partial or complete resection of the diaphysis in over 60 cases of chronic osteomyelitis resulted in:

1. Cure of the infection in over 90 per cent with one operation.

2. Complete bone regeneration in—

Clavicle, Fibula	100 per cent
Femur	90 per cent
Humerus, Ulna	80 per cent
Tibia, Radius	70 per cent

In case of failure of regeneration of the tibia, the fibula may be transplanted to take the place

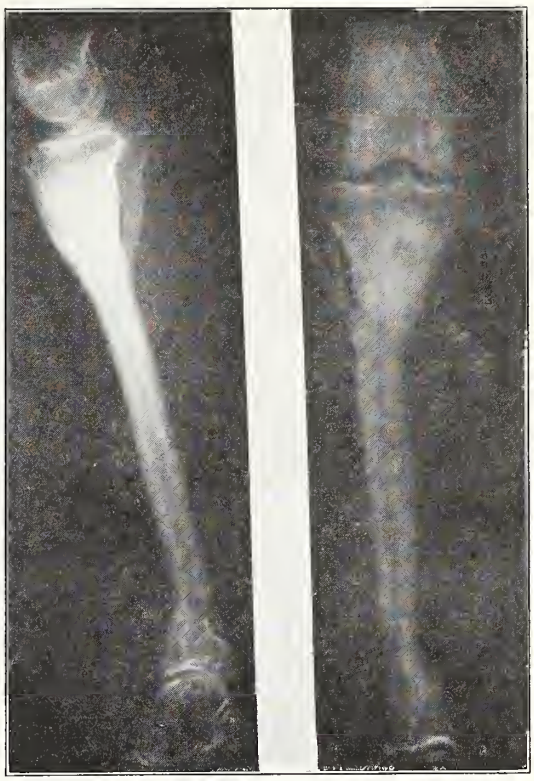


Fig. 5. B. D. Seven years after transplantation of fibula into tibia.

of the tibia (Fig. 5). The lower end of the unregenerated radius may be replaced by the lower

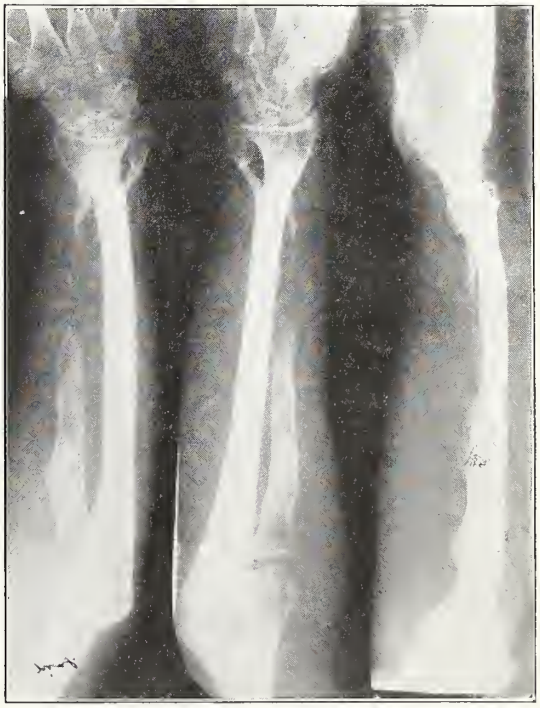


Fig. 6. R. W. Three years after transplantation of lower end of ulna into radius.

end of the ulna (Fig. 6). Excellent function followed these transplants.

CONCLUSIONS

1. Acute metaphysitis should be diagnosed early chiefly on the finding of a localized area of bone tenderness; the abscess opened by incision and drilling; the wound closed.

2. The acute pyogenic joint should be lavaged and closed.

3. Chronic diffuse osteomyelitis should be treated by diaphyseal resection.

4. Chronic localized osteomyelitis should be saucerized.

5. In all cases the extremity should be immobilized.

952 HANNA BLDG.

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Urinary Antisepsis

The visual examination of the urine, both macroscopic and microscopic, is the greatest single aid in the diagnosis and treatment of infections of the urinary tract.

Mandelic acid is the drug of choice in treating the majority of the bacillary infections and also those caused by the streptococcus faecalis.

Sulfanilamide is also of value in treatment of infections caused by bacilli and by some cocci. Caution must be exercised in its use and the drug never should be given unless under the direction of the physician.

Neoarsphenamine is useful in treating infections of the urinary tract caused by cocci.

All foci of infection in the patient should be carefully investigated and eradicated wherever possible, particularly when the coccus is the invading organism in the urinary tract. This is frequently true when organisms cannot be demonstrated by the usual staining and cultural methods.

If the patient who has an infection of the urinary tract is not cured in a reasonable period by the above treatment, the physician should insist on a complete urologic investigation to rule out any coexisting pathology.—Edward N. Cook, M.D., Rochester, Minn.; Jour. Iowa State Med. Soc., Vol. XXVIII, No. 9, Sept., 1938.

A patient, aged seventy-two, sought relief from mild indigestion. Abdominal palpation revealed a large, hard tumor on each side of the abdomen. Routine gastro-intestinal series showed perfect casts of the pelvis and calices of each kidney from extensive calculus formation.—Archie L. Dean, Jr., New York.

Undulant Fever

Low-grade fevers have been found frequently among the women students of the University of Oklahoma. Too often they have been unexplained. They have always been a source of interest as well as concern. This past year we have had an additional staff member, so it has been possible to study and watch these students a little more carefully.

All women students who participate in any kind of physical education are given a complete physical examination before they may enter any activity. Since all freshmen and sophomore women are required to take some type of physical education this examination includes all the women in these two classes with the exception of those excused by their advisers or deans. The girls who were working were also required to have a complete examination. Because of this new ruling many juniors, seniors, and graduate students were seen. All upper classmen who had done their first or second year's work here had had an examination at that time. It was interesting to note that most of those students who had had unexplained elevated temperatures previously still registered above normal.

The Mantoux tuberculin test (O.T.) and the Wassermann test are included in these examinations. An effort was made to rule out early tuberculosis as a cause of the low-grade temperatures. All positive reactors to the tuberculin test had X-rays of their chests. In the doubtful cases they were referred to the specialist. Because of insufficient help in the laboratory a complete blood count and urinalysis were done only when indicated by family history, personal history, or findings at the time of examination.

One hundred cases of undulant fever are considered in this report. The ages ranged from 16 to 52. Each student had an intradermal test and a blood agglutination test. A suspension of killed organisms was used for the skin test.

It does not seem likely that these students acquired the disease while attending school in Norman since the greatest number of these cases were checked because of low-grade temperatures, and in almost all cases the initial temperature taken at the time of entering the university was elevated. Those complaining of fatigue had usually noticed it for a variable period of time prior to entry.

We believe that all persons who continue to have a low-grade temperature should be tested for undulant fever. Those persons who complain of fatigue, even though there may seem to be an adequate reason for this, should always be tested. We believe this is most important, especially so in younger people.—Eleanor L. Schmidt, M.D., Elizabeth Dorsey, M.D., Norman, Okla.; Jour. of the Okla. State Med. Assn. Vol. XXXI, No. 9, Sept., 1938

CHRONIC GASTRITIS

Selected Case Experiences with Gastroscopic Observations.

PART II.

By LEON SCHIFF, M.D., and SANDER GOODMAN, M.D., CINCINNATI, OHIO

DURING the past two years, we have performed 375 examinations with the flexible Wolf-Schindler gastroscope on 231 patients. These consisted of both hospital and outpatients who were referred for gastroscopic examination because of (1) the existence of known gastric disease, (2) the presence of digestive complaints otherwise unexplained, (3) the presence of duodenal ulcer, (4) the presence of posthistamine achlorhydria, (5) the occurrence of hematemesis, (6) the presence of pernicious anemia and very occasionally of avitaminosis or unexplained anemia (Table I).

Chronic gastritis was found in 170 or 73 per cent of the entire group (Table I). In 81 or 34 per cent there was associated gastric carcinoma, gastric syphilis, peptic ulcer or pernicious anemia (Table II), while in 89, or 39 per cent, none of these diseases were present. The clinical diagnoses in these 89 cases made prior to gastroscopy are given in Table III. The clinical diagnosis in those patients presenting a normal stomach gastroscopically are listed in Table IV.

Opportunity was afforded to study thoroughly 40 of the 89 patients with gastritis not complicated with other gastric disease or pernicious anemia. Six of these cases, together with two cases of peptic ulcer and one of pernicious anemia have been selected for report, as they illustrate various phases of chronic gastritis:

CASE No. 1. SUPERFICIAL GASTRITIS; DISAPPEARANCE FOLLOWING REPEATED LAVAGE

Clinical History: F. O. (47864), white male, age 72, entered the Gastric Clinic of the Cincinnati General Hospital on July 12, 1937, complaining of "sour stomach after each meal" for the past three months. Bloatedness and frequent belching were present. He complained also of severe pain in the left hypochondrium which occurred immediately after eating and which lasted 2 to 3 hours. Soda and food afforded only transient relief. His appetite was good and there was no loss of weight. All foods seemed to produce discomfort. The symptoms persisted in spite of a bland diet and medication prescribed by an outside physician. There was no apparent dietary deficiency.

The past history with particular reference to alcoholism and infections was not significant.

Physical Examination: Essentially negative except for chronic nasopharyngitis.

Study made possible by a grant from W. T. Wagner & Sons for the Study of Gastritis and Related Conditions.

Read before the Medical Section, Ohio State Medical Association, at the Ninety-Second Annual Meeting, Columbus, Ohio, May 11 and 12, 1938.

The Authors

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Laboratory Findings: Gastric analysis with histamine revealed hypochlorhydria. The blood count was normal. The urine and stool analyses were negative. The blood Wassermann test was negative.

X-ray Examination: Gastro-intestinal series and gall-bladder visualization were negative.

Course: The patient was treated for six months with a bland diet, alkalies and phenobarbital without alleviation of symptoms. On January 14, 1938, gastroscopy revealed the pylorus and antrum to be normal. The mucosa of the body of the stomach was abnormally red, swollen, and presented increase in high lights together with

TABLE I, CASES SELECTED FOR GASTROSCOPIC EXAMINATION (WITH DIAGNOSIS FOLLOWING CLINICAL EXAMINATON AND GASTROSCOPY)

Total No. Gastroscopies	375
Total No. of Cases	231
Chronic Gastritis (Including cases associated with other gastric disease, duodenal ulcer or pernicious anemia)	170
Chronic Gastritis (Not associated with other gastric disease, duodenal ulcer, or pernicious anemia)	89
Duodenal ulcer	39
Gastric Carcinoma	32
Gastric Ulcer	22
Normal Stomach	21*
Unsatisfactory Examination	12
Pernicious Anemia	9
Gastric and Duodenal Ulcer	4
Gastric Syphilis	3

* This does not include 9 cases of duodenal ulcer and two of pernicious anemia in remission who also showed no abnormalities gastroscopically.

marked excess of thick greenish-grey mucus between the rugae. No erosions or hemorrhages were seen.

Between January 19, 1938 and March 4, 1938, treatment consisted of daily lavage with 42 ounces of artificial Vichy together with a bland diet. There was rapid clinical improvement. After six weeks of this treatment, gastroscopy revealed a normal mucosa, except for slight redness. The patient has continued to take Vichy by mouth in doses of 7 ounces four times daily before meals and has remained free of complaints. There has been no significant change in gastric secretion.

Comment: This case demonstrates the value of repeated lavage in superficial gastritis. We have used both the charged Carlsbad water as well as the artificial alkaline Vichy water and have found them both frequently beneficial in this form of gastritis.

TABLE II. INCIDENCE OF GASTRITIS IN KNOWN GASTRIC DISEASE, DUODENAL ULCER AND PERNICIOUS ANEMIA

	No. of Cases	No. having Gastritis	Per Cent Incidence
Duodenal ulcer	39	30	77
Gastric carcinoma	32	23	72
Gastric ulcer	22	14	64
Pernicious anemia	9	7*	78
Gastric & duodenal ulcer	4	4	100
Gastris syphilis	3	3	100
Totals	109	81	74

* The two cases which showed no gastritis were examined during a remission.

CASE No. 2. SUPERFICIAL GASTRITIS WITH "GASTRIC PURPURA". (ASSOCIATION OF EPIGASTRIC PAIN WITH MULTIPLE MUCOSAL HEMORRHAGES)

Clinical History: A H. (37626), colored female, age 26 entered the surgical service of the Cincinnati General Hospital November 4, 1937, because of marked epigastric pain and vomiting of one week's duration. She stated that except for "gas on the stomach" she had had no previous digestive symptoms. She was a known alcoholic and had been previously admitted to the psychiatric service for delirium tremens. She admitted that she had been on a "spree" before the onset of the present illness. She had not noticed any blood in the vomitus or stools. She had had no chills, fever or jaundice.

Physical Examination: Acutely ill, somewhat confused, colored woman. No icterus. Mucous membranes pale. Tongue smooth and reddened. Abdomen presented generalized tenderness, more marked in the epigastrium, with some voluntary spasm. The liver edge was quite tender and was felt two finger-breadths below the right costal margin; spleen not felt.

Laboratory Findings: RBC 3,500,000; Hb 11.2 Gms. per 100 cc.; WBC 4,600 with 52 per cent lymphocytes, 41 per cent neutrophils and 7 per cent monocytes.

Gastric Analysis revealed hypochlorhydria following histamine.

Blood Wassermann test negative. Stools negative to guaiac on repeated examination.

Gastroscopy (November 15, 1937): The pylorus and antrum were normal. The mucosa appeared glistening and presented an increase in high lights. The folds on the anterior wall were very improminent. The entire body of the stomach was studded with numerous mucosal hemorrhages of various sizes frequently occurring in clusters of three to six per gastroscopic field. No erosions were seen.

Course: The patient was first observed on the surgical service for the possibility of an acute surgical condition of the abdomen. She was treated with intravenous glucose solution and a modified Sippy diet. She was given an abundance of vitamines and 1 gram of ferrous sulphate daily. There was progressive improvement and complete disappearance of pain.

Gastroscopic examination was repeated on December 20, 1937, and a remarkable change was noted. The mucosa was a normal orange-red in color, the rugae were of normal size and the hemorrhages had entirely disappeared. Improvement was striking.

Comment: While an occasional hemorrhage may be seen in a normal gastric mucosa, the association of epigastric pain with multiple hemorrhages seemed rather striking.

CASE No. 3. HYPERTROPHIC GASTRITIS WITH HEMATEMESIS: DISAPPEARANCE OF SYMPTOMS AND PERSISTENCE OF GASTRITIS

Clinical History: C. I. (48471), a white male painter, age 39 was referred to gastric clinic from the cardiac clinic of the Cincinnati General Hospital on November 2, 1936, because of hematemesis which had occurred one month before. He stated that he had had no digestive symptoms until 1933 when he noticed that about three to four times yearly he would suffer with drawing pains in the upper abdomen. These were not produced by any particular food, lasted for about two to three days and required no medication. In the intervals, he was symptom-free except for occasional "heart-burn". During some of the episodes of pain, his stools were black. On Octo-

TABLE III. CLINICAL DIAGNOSIS (PRIOR TO GASTROSCOPY) IN CASES FOUND TO HAVE CHRONIC GASTRITIS (NOT ASSOCIATED WITH OTHER GASTRIC DISEASE, DUODENAL ULCER OR PERNICIOUS ANEMIA)

CLINICAL DIAGNOSIS	No. of Cases
Chronic Gastritis	24
Achlorhydria (Post-histamine)	19
Hematemesis—Cause?	13
Gastric Neurosis	8
Possible Peptic Ulcer	7
Possible Gastric Carcinoma	4
Glossitis—Possible Avitaminosis	3
Macrocytic Anemia—Cause?	2
Hepatic Cirrhosis	2
Chronic Alcoholism	2
Congenital Hemolytic Icterus (with achlorhydria)	1
Chronic Cholecystitis (with achlorhydria)	1
Food Poisoning	1
Polycythemia Vera	1
Hypochromic Anemia	1
Total	89

ber 6, 1936, about two hours after eating chili, he complained of a cramping pain in the epigastrium, which was followed by vomiting, first of the ingested food and about two hours later of about "two to three quarts of coffee-colored material". Following this, he passed tarry stools and was forced to stay in bed for about a week because of faintness and weakness. He was attended by an outside physician who gave him a modified Sippy diet as well as medication. Since this hemorrhage, the patient had been symptom-free. His appetite was good and he had lost no weight.

Past History: The patient had been a sufferer of rheumatic heart disease with mitral and aortic valvulitis for which he was being cared for in cardiac clinic. In 1935, he was admitted to the hospital for two weeks because of mild congestive failure.

TABLE IV, CLINICAL DIAGNOSIS IN PATIENTS PRESENTING NORMAL GASTROSCOPIC FINDINGS*

	No.
Possible Peptic Ulcer	6
Hematemesis—Cause?	5
Chronic Gastritis	4
Gastric Neurosis	2
Possible Gastric Carcinoma	2
Hypochromic Anemia	1
Macrocytic Anemia (in a patient with hepatic cirrhosis, ulcerative colitis, and glossitis)	1
Total	21

* Nine cases with proved duodenal ulcer and two with pernicious anemia in remission are not included.

Physical Examination: Dental caries and pyorrhea. Tongue normal. Chest negative except for cardiac findings. No abdominal tenderness.

Laboratory Findings: Red blood count 2.2 million; hemoglobin 34 per cent (Sahli) (11/9/36). Stool and urine analyses were negative. Gastric analysis with histamine revealed normal acidity. Blood Wassermann test negative.

X-ray Findings: Gastro-intestinal series negative (November 3, 1936).

Gastroscopy (December 21, 1936: Pylorus and antrum normal. The rugae were thickened and reddened especially on the lesser curvature of body of stomach. Several of them appeared rigid and beaded. There was some excess of mucus between them. No erosions or hemorrhages were present.

Course: The patient was lavaged with charged Carlsbad water from January 4, 1937 until March 15, 1937. At the end of this time, gastroscopy was repeated and no significant improvement was noted. As the patient was free of symptoms and gastroscopic changes had not been affected, lavage therapy was discontinued.

No treatment was given for one and a half years and there was no recurrence of symptoms except for occasional "heart burn". The gastric acidity, however, with histamine stimulation showed a marked variation from month to month; fluctuating from normal to marked hypochlorhydria and on one occasion to a genuine achlorhydria. At the present time the curve of acidity is normal. The gastroscopic findings on four occasions have shown little variation.

Comment: This case is of interest because of (1) the occurrence of massive hemorrhage otherwise unexplained, (2) the absence of pain for a long period of time in the presence of changes (gastroscopically) characteristic of hypertrophic gastritis and (3) the marked variation of gastric acidity.

CASE No. 4, LOCALIZED HYPERTROPHIC GASTRITIS: DISAPPEARANCE AFTER REPEATED LAVAGE

Clinical History: D. J. (69549), a white female, age 62, entered the Gastric Clinic of the Cincinnati General Hospital on May 31, 1930, because of intermittent epigastric pain and heart-burn of twelve years' duration. The pain had been occurring about two to three hours after meals and had been relieved by food or soda. It was frequently present before breakfast and at night. Flatulence, gaseous eructation and constipation were present. Raw fruits and vegetables produced distress. The appetite was good. There was no history of colic, jaundice, hematemeses, melena, or loss of weight. For one week prior to entry, her symptoms were more marked and were associated with frequent sharp sticking pains below the right scapula.

Physical Examination: Scarring of corneae and conjunctivae from old trachoma; tenderness in epigastrium; and thickening of the peripheral vessels. The remainder of the examination was negative except for a blood pressure of 160/84.

Laboratory Findings: Gastric analysis with histamine revealed normal acidity. The blood count was normal. Biliary drainage negative. Blood Wassermann test negative. Urinalysis and stool analysis negative.

X-ray Findings: Gastro-intestinal and gall-bladder visualization negative.

Course: She was treated with alkaline powders and saline cathartics with temporary relief. On June 13, 1932, she was admitted to the medical service because of persistent pain which was not relieved by alkalies. She was placed on a Sippy regime for two weeks with complete relief. Repeated stool analyses were negative for occult blood. Gastric analysis with an Ewald test meal showed hyperacidity repeatedly. Gastro-intestinal X-ray series and gall bladder visualization were negative on two more occasions. In the next three years, she was observed at regular intervals and treated with various drugs but with no relief. She was alternately given hydrogen peroxide lavages, mucin and silicon dioxide with no benefit. In July, 1935, she was studied in allergy clinic with negative results. On April 6, 1936, she was gastroscoped by Dr. Rudolph Schindler who reported the following: "Pylorus and antrum normal. Lesser curvature of posterior wall showed small nodes. Mucous membrane otherwise negative. Impression: Circumscribed hypertrophic gastritis."

In April, 1936, daily lavage with charged Carlsbad water was begun and continued for more than a year, with marked clinical improvement. For the past six months, she has received artificial Vichy by mouth and has continued to do well. The gastric mucosa has been observed to gradually return to normal on five gastroscopic examinations, the last being done on March 3, 1938. There has been no change in gastric secretion and the blood count has remained normal.

During the course of observation, lavage was

discontinued for a period of three months and alkalies and phenobarbital were substituted. There was a return of symptoms. Charged Carlsbad water and Vichy were alternately given orally and seemed to relieve her symptoms as much as when previously given in the form of lavage.

Comment: This patient has been followed for eight years and received various forms of symptomatic treatment for the first six years of this period without relief. Both symptomatic and gastroscopic improvement followed the use of lavage with charged Carlsbad water and were maintained by the oral use of either charged Carlsbad water or artificial Vichy. Also of interest is the disappearance of hypertrophic changes which, according to Schindler, are ordinarily resistant to all forms of therapy.

CASE No. 5, LOCALIZED HYPERTROPHIC GASTRITIS ROENTGENOLOGICALLY SIMULATING CARCINOMA

Clinical History: T. C. (12919), a 42 year old single white male was admitted to the Cincinnati General Hospital on March 19, 1936, because of continuous vomiting of two week's duration. For the past 16 years, he had burning epigastric pain relieved by soda and to some extent by food. He was believed to have both a duodenal and gastric ulcer for which he was being treated since December 17, 1934. At that time, a gastro-intestinal X-ray series showed a large niche in the prepyloric area and a deformed duodenal bulb with a niche on the lesser curvature side. Gastric analysis revealed a free acidity of 48 and a total acidity of 61. A gastro-intestinal X-ray series on April 10, 1935, showed a rather marked irritability of the stomach with a constant prepyloric deformity. In December, 1935, the patient was admitted to the medical service because of persistent vomiting and constant epigastric pain. An X-ray series showed a deformity in the prepyloric region and an irritable and deformed duodenal cap. There was no gastric retention. He was placed on a strict Sippy regime with improvement of symptoms and had been discharged from the hospital one month prior to his present admission. He stated that since leaving the hospital he had had a return of pain and had been vomiting for two weeks. The vomitus was bloody the day of admission. He had lost 30 pounds in weight during the past year, and had been quite weak.

Physical Examination: Negative except for tenderness in the epigastrium, an apparently dilated stomach and a large ventral hernia.

Laboratory Findings: RBC 3.8 million; Hb. 70 per cent; WBC 7,000, neutrophils 64 per cent, lymphocytes 30 per cent, and monocytes 6 per cent. Urinalysis negative. Stool examination; benzidine 3+. Gastric analysis: free acid 30, total acidity 70. The gastric contents contained old blood. Blood Wassermann test 3+.

X-ray Findings: Gastro-intestinal series (March 17, 1936) showed a large defect in the prepyloric region which appeared to be on the greater curvature. There was a 25 per cent gastric residue at the end of 24 hours. Because of the location of the lesion, it was thought that malignant changes were present.

Gastroscopy was performed on April 7, 1936, by Dr. Rudolph Schindler. "The whole antrum was seen, also part of the lesser curvature. The pylorus was observed to contract regularly. No tumor was seen. Some parts of lesser curvature and posterior wall were markedly nodular apparently as the result of a circumscribed hypertrophic gastritis. No evidence of malignant lesion or ulcer. Impression: Circumscribed hypertrophic gastritis".

Course: Another gastro-intestinal series on April 10, 1936, revealed the same findings as reported above. The patient was transferred to the surgical service where a polygastric resection and a gastro-jejunostomy were performed. A duodenal ulcer and a localized prepyloric hypertrophic gastritis (verified by microscopic section) were found. Recovery was uneventful and the patient was discharged June 11, 1936, in good condition. He has since had a return of epigastric pain and dyspepsia and a recent gastroscopic examination revealed the presence of swollen and reddened rugae with an excess of mucus between them. No nodules were present at this time.

CASE No. 6, ATROPHIC GASTRITIS ASSOCIATED WITH PERNICIOUS ANEMIA; DISAPPEARANCE OF GASTRITIS FOLLOWING INDUCED REMISSION

Clinical History: S. B. (91130), white, retired butcher, aged 81, entered the Cncinnati General Hospital on March 26, 1938, because of weakness in the back and legs and tingling of the hands and feet of five years' duration. For the past four months, he had been complaining of progressive shortness of breath and progressive dependent edema which had gradually made bed rest necessary. There was no soreness of the tongue. There was a loss of five pounds in weight in the past year. His diet was deficient in both vitamins and proteins.

Physical Examination: The patient was a well-developed old man, rather short of breath. The skin presented a lemon-yellow pallor and the sclerae were icteric. A generalized edema was present involving the subcutaneous tissue of the trunk and face as well as that of the dependent tissues of the body. The tongue was slightly reddened, smooth and clean. There was marked pallor of the mucous membranes. The heart was slightly enlarged to the left; the sounds were rapid and of poor quality. There was a blowing systolic murmur over the entire precordium. Blood pressure 145/45. Both liver and spleen were palpable. Sternal tenderness was present.

Laboratory Findings: Red blood count 1.2 million; hemoglobin 6.0 grams. Blood smear and hematocrit changes typical of pernicious anemia. Urine negative. Stool negative. Icteric index 14. Gastric analysis: post-histamine achlorhydria. Blood Wassermann test negative.

Gastroscopy (April 1, 1938): Pylorus and antrum normal. Rugae absent. Mucosa greyish and glistening. Numerous branching vessels seen in the body of stomach. Impression: Marked diffuse atrophic gastritis.

Course: The patient was first treated orally with an inactive antianemic preparation which was followed by a potent liver extract administered intramuscularly. He showed progressive clinical improvement and on 3/9/38 the red blood count was 2.9 million and the hemoglobin 10.0 grams per 100 cc. Gastroscopic examination on the same day revealed a striking change. The pylorus and antrum were normal and the rugae quite prominent. No branching vessels were seen and the mucosa was of good color. In several places, there were localized greyish atrophic patches as well as streaks of erythema. Liver extract therapy was continued and the patient was discharged from the hospital on 5/25/38. (On 6/3/38 he was regastroscoped and the mucosa

was of normal color, the rugae of normal size and atrophic changes were entirely absent.) It is interesting to note that his tongue has remained smooth.

Comment: This case illustrates the presence of diffuse atrophic gastritis in pernicious anemia in relapse and the return of the gastric mucosa to normal following induced remission. It confirms the experience of Jones and associates and that of Lehman.

CASE No. 7, ATROPHIC GASTRITIS: DISAPPEARANCE FOLLOWING ORAL ADMINISTRATION OF DESICCATED HOG'S STOMACH EXTRACT

Clinical History: L. S. (43234), a white male, machinist, age 34, was referred to the gastric clinic of the Cincinnati General Hospital on July 12, 1937, because of epigastric pain of two months' duration. The pain was localized, appeared about 15 to 30 minutes after meals and was at times relieved by soda. It could be produced by cabbage, and by ingestion of fried and greasy foods. He also complained of a great deal of "sour belching", and flatulence. The appetite was good and there was no nausea, emesis, tarry or clay-colored stools. There was no history of jaundice or of loss of weight.

Past History: Acute rheumatic fever in 1923. Congestive heart failure in 1936. He had been observed since 1936 at the cardiac clinic for rheumatic heart disease with mitral stenosis and aortic insufficiency together with auricular fibrillation.

Physical Examination: Negative except for typical cardiac findings. (There was no evidence of congestive failure). No evidence of glossitis. There were no abnormal neurological findings.

Laboratory Findings: The blood count revealed a mild macrocytic anemia: red blood count 4.3 million, hemoglobin 15.7 grams and M.C.V. 100. The stool and urine analyses were negative. The Kahn test was negative. Gastric analysis following histamine revealed hypochlorydria. Two biliary drainages were negative.

X-ray Examination: Chest negative except for cardiac enlargement presenting a "mitral configuration". Gastro-intestinal series and gall-bladder visualization negative.

Course: He was treated with a bland diet and alkalies for four months. At first, he experienced slight relief but later the pain became more marked, was especially severe at night and at times radiated to the back.

Gastroscopy (November 12, 1937): The pylorus and antrum were normal. The mucosa was pale and greyish the rugae very improminent and bluish branching vessels were seen on the lesser curvature of the body of stomach. A diagnosis of diffuse atrophic gastritis was made.

He was given 60 grams of desiccated hog's stomach (ventriculin)* daily and a bland diet for the next four months. He began to improve immediately. At the end of this time he was symptom-free. The gastric acidity had increased to normal and the anemia disappeared.

Gastroscopy (March 7, 1938): The rugae were of normal size, the mucosa of normal (orange-red) color with a slight increase in high lights. There were no greyish or greyish-green patches and no visible vessels. Two small mucosal hemorrhages were seen. The findings were practically those of a normal stomach. Evidently marked improvement had occurred.

*Kindly furnished by Parke Davis and Co.

Comment: This case experience shows that the atrophic gastritis not associated with pernicious anemia can revert to normal following administration of desiccated hog's stomach (ventriculin) in massive doses. We have had similar experiences in other cases of atrophic gastritis which are to be published elsewhere.

CASE No. 8, ATROPHIC GASTRITIS ASSOCIATED WITH HEPATIC CIRRHOSIS AND NORMOCYTIC ANEMIA; DISAPPEARANCE OF GASTRITIS FOLLOWING ADMINISTRATION OF IRON (AND SIPPY DIET)

Clinical History: A. L. (83815), a white male, unemployed night club entertainer, age 47 entered the Cincinnati General Hospital on December 17, 1937, complaining of intermittent abdominal pain of three years' duration which had become more marked during the past year. The pain was burning in nature, located in the epigastrium, lasted for two to three hours, bore no relationship to meals and was not helped by food or soda. In the past six weeks, vomiting had been present which at times relieved the pain. The vomitus was not bloody and there were no tarry stools. His appetite was good but he was afraid to eat. He had lost 60 pounds in weight and a great deal of strength since the onset of symptoms. He gave a strong history of alcoholism. His diet had been apparently inadequate both in vitamins and proteins presumably because of unemployment. He was treated by an outside physician for one month and in gastric clinic for another month without improvement.

Physical Examination: The tongue was smooth but was not reddened. There was moderate pallor of the mucous membranes. The liver edge was firm and was felt two finger-breadths below the right costal margin. The edge of the spleen was firm and was felt one-finger-breadth below the left costal margin. There was tenderness on deep palpation in the upper right quadrant.

Laboratory Findings: White blood count 5,300 with normal differential count; red blood count 3.1 million; hemoglobin 9.5 grams per 100 cc. Stools were positive to guaiac only once in seven examinations. Urinalysis negative. Blood Wassermann test negative. Gastric analysis revealed normal acidity with histamine. Two biliary drainages were negative. Icteric index 6. Bromsulphalein retention 60 per cent in one half hour. Modified Takata-Ara test negative.

X-ray Findings: Gastro-intestinal series (November 15, 1937): There was a delay in the passage of barium at the junction of the second and third portions of the duodenum. There was 30 per cent gastric retention at the end of 24 hours. The cap was irritable. Re-examination on 1/5/38 showed practically the same findings but without gastric retention.

Gastroscopy (December 24, 1938): Pylorus not clearly seen. Antrum normal. Mucosa purplish and shiny. Rugae absent. Bluish branching venules scattered throughout body of stomach. A large hemorrhagic area and several swollen rugae were seen on the posterior wall near the greater curvature. Impression: Marked atrophic gastritis; localized superficial gastritis.

Course: A clinical diagnosis of chronic atrophic gastritis with hepatic cirrhosis was made and the patient was placed on a Sippy diet and was given three grams of reduced iron daily. He showed progressive clinical improvement and on January 10, 1938, the red blood count was 4.4 million and the hemoglobin 13.2 grams per 100 cc. Gastro-

scopy performed on the same day revealed a disappearance of the atrophic changes. The pylorus and antrum were normal, the mucosa was dark and glistening, the rugae were improminent and no vessels were seen. The patch of markedly swollen rugae previously described was no longer present. The patient was discharged from the hospital on January 18, 1938.

Comment: We cannot fully explain all the clinical findings. In addition to atrophic gastritis, hepatic cirrhosis and normocytic anemia were present. The significance of the bizarre X-ray findings is not clear. This case does show the almost complete gastroscopic disappearance of atrophic changes in two and a half weeks, presumably as the result of iron therapy as Sippy management per se should not influence atrophic gastric changes.[40]† The response to iron confirms the observations of Lehman,[25] and of Chevallier and Moutier.*

CASE No. 9, GASTRITIS ASSOCIATED WITH OLD GASTRO-ENTEROSTOMY: IMPROVEMENT AFTER REPEATED LAVAGE

Clinical History: G. M. (14653), a white plumber, age 61, entered the gastric clinic of the Cincinnati General Hospital on July 7, 1930, because of "hemorrhage from the stomach". He stated that since 1913 he had suffered from epigastric pain occurring soon after meals and relieved by soda. In 1921, a posterior gastro-enterostomy was performed for pyloric obstruction associated with a duodenal ulcer. His symptoms recurred soon after operation, but were then associated with a good deal of belching, flatulence, and vomiting. In 1924, he had his first hemorrhage and since then he has had seven massive gastro-intestinal hemorrhages requiring hospital treatment; the last one in February, 1937. In the intervals between hemorrhages, he suffered a good deal of pain. Slight benefit was obtained on a bland diet together with alkalies and belladonna. There was a history of treated lues.

Physical Examination: not remarkable except for carious teeth, pyorrhea and tenderness in the epigastrium.

Laboratory Findings: Gastric analysis: normal acidity with histamine. Blood Wassermann test negative. Blood, stool, and urine examinations negative.

X-ray Findings: Repeated gastro-intestinal series showed a functioning gastro-enterostomy stoma, a deformed duodenal cap and no evidence of marginal ulcer. Gall bladder visualization normal.

Gastroscopy (May 16, 1936): The plyorus and stoma were seen, the folds about these openings were reddened, thickened, and nodular. There was an excess of mucus between them.

Course: For six years, he was treated in the gastric clinic with various drugs, alkalies and mucin with no improvement. On May 18, 1936, lavage with charged Carlsbad water was begun and continued until the present time with marked improvement. His appetite and strength have returned and vomiting has ceased. He still complains of some "belching and gas". The gastric acidity during this two year period has not been significantly affected and there has been only a slight change in the gastroscopic findings on seven examinations.

Comment: This case illustrates the symptomatology of what has been called "postoperative gastritis", and shows how resistant this form may be to usual methods of treatment. There was a favorable subjective response to lavage.

SUMMARY

Chronic gastritis is frequently encountered in the presence of known gastric or duodenal disease, in the presence of unexplained digestive complaints or hematemesis and in the presence of achlorhydria (both with and without pernicious anemia).

The so-called superficial and rarely the hypertrophic form of gastritis may disappear following the use of repeated lavage with artifically charged alkaline waters. Symptomatic improvement may follow such therapy in the so-called "post-operative" form. On the other hand, gastritis may persist in spite of disappearance of symptoms.

Epigastric pain may be associated with multiple mucosal hemorrhages occurring in superficial gastritis. Disappearance of pain may be concomitant with disappearance of such lesions.

Localized hypertrophic gastritis may roentgenologically simulate carcinoma.

The atrophic gastritis associated with pernicious anemia may disappear following induced remission with potent liver extract therapy.

Atrophic gastritis associated with normocytic anemia and hepatic cirrhosis may disappear following the oral administration of iron.

Atrophic gastritis associated with hypochromic anemia may disappear following the oral administration of iron.

We wish to take this opportunity to express our thanks to Dr. David Lerner, to Dr. H. G. Reineke of the Department of Roentgenology, to Dr. Max M. Zinninger and Miss Mary Maciel of the Department of Surgery, and to Mrs. Pesa Hanson for their assistance in this study.

New stones formed, with severe colic, three months after operation. They were again removed and in two weeks there was another severe renal colic, and the X-ray showed new calculi forming. Two months later, five different shadows in the pelvis were seen on the X-ray plate, and two in the lower calyx. Three months later, almost six months from the last operation, several additional calculi were found on the X-ray plate. From then on, a series of X-ray examinations revealed the astonishing fact that the patient was forming a calculus a week. The kidney function was good, there was a tendency to fusion of the calculi, no further colic, and additional surgery was deemed inadvisable until later, when a nephrectomy would undoubtedly be necessary.—Joseph A. Lazarus, New York.

†References given in Chronic Gastritis, Part I, appearing in preceding issue of this Journal.

*Chevallier, P. and Moutier, F., La Gastroscopie dans les maladies du sang, La Sang, 11:935, 1937.

THE TIME ELEMENT IN THE REDUCTION OF FRACTURES

By BARNEY J. HEIN, M.D., F.A.C.S., Toledo, Ohio

THE time element in the treatment of fractures may be defined as follows:

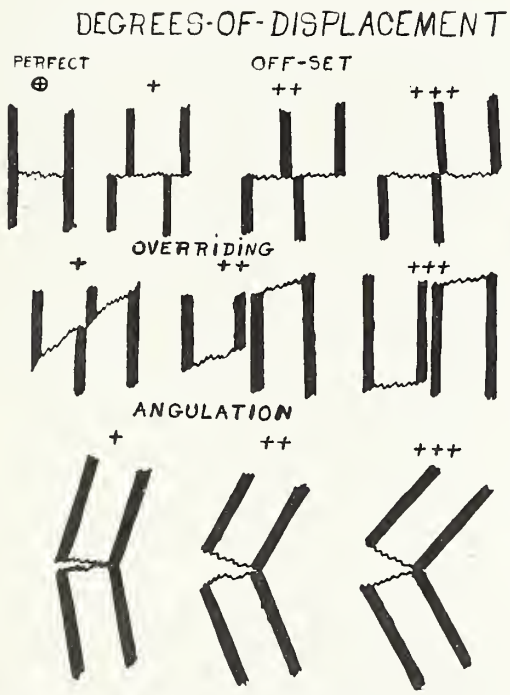
1.—Reduction: This is the time elapsing between the accident and the manipulation of the fracture.

2.—Immobilization: This is the time necessary for splinting. It represents the time required for protection of the limb until good union occurs.

3.—Disability: This is the time lost from work. It extends from the date of accident until the patient is able to resume his place in the industrial or business world.

At present we are interested in the time of reduction only. We propose to determine and interpret its influence upon the thoroughness of reduction, and the results obtained. We have all felt that the sooner a displaced fracture is manipulated the easier and the better will be the reduction. We have not always had evidence to prove that conclusively.

FIGURE 1



Let us consider first what factors influence the time elapsing before the reduction of a fracture.

1.—**The Time the Patient First Reports to the Physician.** Most fractures are seen within a short time after they occur. This is especially true of the ambulatory case. In some cases, however, the seriousness of the case is not recognized by the patient, and home treatment is first tried with its subsequent delay in reporting to the physician. This delay is one over which the physician has no control.

Submitted August 26, 1938.

The Author

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FIGURE 2

FRACTURE CODE

Types	S	Simple
	C	Comminuted
	Cm	Compound
	T	Transverse
	O	Oblique
Sites	U	Upper 1/3
	M	Middle 1/3
	L	Lower 1/3

2.—**General Condition of the Patient.** With the increasing frequency of the crushing type of injury due to the automobile, it is not at all unusual now to see people with multiple injuries. The frequency of head, chest and abdominal injuries complicating the fractures with their profound effect upon the general condition of the patient makes delay in reduction often imperative.

3.—**Condition of the Fractured Part.** Impairment of blood supply to the fractured part and swelling about the site of fracture have in the past often been given as two common reasons for delay in reduction. This possibly is true in some instances, but personally the writer feels that the best way to improve the blood supply or to prevent swelling is to reduce the fracture promptly. In most cases waiting for the period of swelling to subside only makes reduction more difficult and less perfect.

4.—**Availability of the Physician.** This is of course quite obvious, but occasionally the attending physician is not immediately available. Waiting until the following day as so often happens in hospital practice is mentioned to be condemned.

5.—**Hospital Service.** With the increasing use

FIGURE 3

REDUCED WITHIN 4 HOURS

No.	Displacement											
	Before Reduction							After Reduction				
	Bone	Type	Site	Over-riding	Offset	Angu-late	Rota-tion	Per-fect	Over-riding	Offset	Angu-late	Rota-tion
1	Radius	S-C	M	+++	+++	++		⊕				
2	Ulna	S-C	M	+++	+++	++				+		
3	Tibia	S-O	M		+	+	+	⊕				
4	Fibula	S-O	M		++	++	+			+		
5	Radius	S-C	L	++	+	+		⊕				
6	Ulna	S-C	L	++	+	+		⊕				
7	Radius	S-C	L	+	+++	+				+		
8	Radius	S-C	L	+	++	++		⊕				
9	Radius	S-T	L		+	+++		⊕				
10	Radius	S-T	L		++			⊕				
11	Radius	S-C	L		++	++				+		
12	Radius	S-T	L	+	+++	+				+		
13	Ulna	S-T	L		+	+		⊕				
14	Radius	S-T	L	++	+++	++		⊕				
15	Ulna	S-T	L		+	++				+		
16	Radius	S-T	L	+	+++	++					+	
17	Radius	S-T	M			+++		⊕				
18	Ulna	S-T	M			+++		⊕				
19	Ulna	S-O	M	+	++	+++				+		
20	Radius	S-T	L	+	++	+++		⊕				
21	Radius	S-T	L	++	++	++	+			+		
22	Radius	S-T	L	+	++	++	+	⊕				
23	Radius	S-T	M	+	+	++		⊕				
24	Ulna	S-T	M		+	+		⊕				
25	Radius	S-T	L	++	+++			⊕				
26	Ulna	S-T	L	++	+++					+		
27	Radius	S-C	L	+++	+++	++			+	+		
28	Ulna	S-T	L			+++		⊕				
29	Radius	S-T	L			+++		⊕				
30	Radius	S-O	L		+	+++		⊕				
31	Femur	Cm-C	L	++	++	+				+		
32	Humerus	S-T	U	++	+++	+		⊕				
33	Radius	S-T	L		++	++				+		
34	Tibia	Cm-O	M	+++	+++	++	++		++	+	+	
35	Fibula	S-O	M	++	++	++	++		+		+	
36	Tibia	S-O	L	++	++	++				+	+	
37	Fibula	S-O	L	++	++	++				+	+	
38	Radius	S-C	L	++	++	+					+	
39	Radius	S-C	L	+++	++	+++		⊕				
40	Radius	S-T	L	+	++	++		⊕				
41	Tibia	S-T	L	++	++	++	+	⊕				
42	Fibula	S-T	L	+	++	++	+			+		
43	Radius	S-T	L	++	++	+		⊕				
44	Ulna	S-T	L	++	++	+		⊕				
45	Radius	S-T	L	++	++	++				+		
46	Radius	S-T	L	++	++	++		⊕				
47	Humerus	S-T	L	+	+++	+++				+		
48	Radius	S-C	U	++	+++	+			+	++		
49	Ulna	S-C	U	++	+++	++			+	++		
50	Tibia	Cm-C	L	++	+++	+				+	+	

of the hospital facilities in the treatment of fractures, this service should be placed on an emergency basis. The X-ray department should be equipped to be ready at all times, while adequate assistance should be available at all times for the use of the traction tables, flouroscope, etc.

The Study—Two hundred and twenty-eight cases of displaced fractures have been reviewed. All were badly displaced. All simple cases were discarded, for example the simple angulation type so often seen in the young where simple pressure straightens out the fracture. The cases were all checked roentgenologically before and after reduction. The displacements were classified under the following heads (1) off-set, (2) over-riding, (3) angulation, and (4) rotation of fragments. A true evaluation of primary rotation of the fragments following the injury has been impossible due to the first aid splintage adminis-

FIGURE 4

REDUCED WITHIN 4–12 HOURS

No.	Bone	Type	Site	Displacement: Before Reduction: Overriding	Offset	Angulate	Rotation	After Reduction: Perfect	Overriding	Offset	Angulate	Rotation
1	Ulna	S-O	M	+++	+++	++				+		
2	Radius	S-T	L	+	+++	++		⊕				
3	Humerus	S-O	U	++	++				+	+		
4	Radius	S-C	L		++	++		⊕				
5	Humerus	S-T	M	+	+++	++		⊕				
6	Femur	S-C	U	++	+++				++	++		
7	Radius	S-C	L	++	++	+		⊕				
8	Radius	S-T	U		+++					+		
9	Humerus	S-T	M	+++	+++	+++				++	+	
10	Ulna	S-O	M	+++	++					+		
11	Radius	S-O	L	++	++	+		⊕				
12	Radius	S-O	M	+	++					+		
13	Ulna	S-T	M		++	+				+		
14	Radius	S-O	L		+	+++		⊕				
15	Radius	S-T	L	+++	+++	++				+		
16	Ulna	S-T	L	+++	+++	++		⊕				
17	Radius	S-C	L	+++	+++	++				+		
18	Ulna	S-T	L		++					+		
19	Radius	S-O	L	++	+++	++				++		
20	Radius	S-T	L	+	++	++		⊕				
21	Ulna	S-O	L		+					+		
22	Radius	S-O	M	+	+++	++			+	+		
23	Ulna	S-O	M	++	+++	++				+		
24	Femur	S-T	U	++	+++	++	+			+		
25	Ulna	S-C	L	++	++	+				+		
26	Humerus	S-T	U	++	+++	++				+		
27	Humerus	S-O	U	+++	++	+				+		
28	Humerus	S-T	L	++	+++	++				+		
29	Radius	S-C	L	++	++	++				+	+	

tered in the hospitals before the roentgenograms are taken.

The degree of displacement was designated by +'s, that is, one +, slight; ++, moderate; and +++, severe. The rating of the displacement is a relative thing, but as all cases were treated by the writer, and as the rating of the displacement was also tabulated by him the element of error has been reduced to a minimum. This gives us a basis for considering the degree of improvement in position of the fragments following reduction. The entire series was then divided into seven groups, according to the time elapsed before reduction; those reduced within the first four hours; those from four to twelve hours; twelve to twenty-four hours; twenty-four to forty-eight hours, forty-eight to seventy-two hours; seventy-two hours to five days, and those after five days.

Our standard of reduction was a perfect architectural one, that is, one which had no off-set, no angulation, no shortening, and no rotation. Perfect architectural reductions have been designated on the charts by a circle with a cross within it.

In Fig. 1 there is illustrated graphically the kinds and degrees of displacements. A one + offset is one with displacement up to one-third of the width of the shaft of the bone; a two + is a displacement of two-thirds the width, while three + is any displacement over two-thirds the width of the shaft.

In the overriding group one + designates any displacement up to the width of the shaft of the fractured bone; two—shortening equal to the width of the bone; while three + any shortening beyond that point.

The angulation was also tabulated by degrees as seen in this chart.

Fig. 2 explains the fracture code used in the time charts.

All the fractures of this series, were of the six long bones; the radius, ulna, humerus, tibia, fibula, or femur. These bones were chosen for the following reasons:

(1) The bones are long and adequate leverage for manipulation can be exerted.

(2) Due to this adequate leverage they can be more efficiently immobilized.

(3) They can be more easily checked by roent-

FIGURE 5

REDUCED WITHIN 12-24 HOURS

No	Bone	Type	Site	Displacement: Before Reduction: Over-riding	Offset	Angu-late	Rota-tion	After Reduction: Per-fect	Over-riding	Offset	Angu-late	Rota-tion	
2	Humerus	S-O	L	+	++	++		⊕					
3	Femur	S-O	M	+++	+++	+			++	++			Extension
4	Blake	S-T	M	++	+++	+			++	+			Second-R
5	Tibia	S-O	U		++					+			
6	Fibula	S-O	U		+					+			
7	Radius	S-T	L			++					+		
8	Ulna	S-T	L		++	++				+			
9	Radius	S-C	L	++	+++	++				+			
10	Humerus	S-C	U	+	++	+					+		
11	Femur	S-O	U	++	+	+				+			
12	Femur	S-O	U	++	+++	++				+			
13	Humerus	S-T	L	++	+++	++				++			Second-R
14	Radius	S-T	M	++	+++			⊕					
15	Ulna	S-O	M	+	++					+			
16	Radius	S-C	L	+	++	++					+		
17	Radius	S-O	L	+	++	++				+			
18	Radius	S-C	L	++	++	+				++			Second-R
19	Femur	S-T	U	+++	+++	++			++	++			Open-R
20	Femur	S-O	U	++	+++	+++			++	++			Open-R
21	Humerus	S-C	L		+	+++		⊕					
22	Humerus	S-C	L	++	+++	++				++	+		
23	Humerus	S-T	L		++	++				+			
24	Tibia	S-O	L	+	+	+				+			
25	Fibula	S-O	L	+	+	+				+			
26	Radius	S-T	M	++	+++	+				++			Second-R
27	Tibia	Cm-C	L	+	++	++				+	+		
28	Fibula	S-C	L	+	++	++				++			
29	Tibia	S-C	M	+++	+++	++				+			
30	Fibula	S-O	M	+++	+++	++				+			
31	Tibia	S-C	L	++	+++	+				+			
32	Fibula	S-C	L	++	+++	+				+			
33	Humerus	S-T	U	++	+++	++		⊕					
34	Radius	S-O	M	+	+++	++				+			
35	Ulna	S-O	L		++	+				++			
36	Radius	S-T	L	++	+++	++				+			
37	Ulna	S-T	L	++	+++	++				+			
38	Radius	S-T	M	++	++	+		⊕					
39	Ulna	S-O	M	++	++	+		⊕					
40	Radius	S-T	L	++	+++	++				+			
41	Ulna	S-T	L	++	+++	++				+			
42	Tibia	Cm-O	U	++	+++	+++				+	+		
43	Fibula	S-O	U	++	+	++				+			
44	Femur	S-T	M	++	+++	++			+	+			
45	Radius	S-C	L	+	+++	++		⊕					
46	Humerus	S-C	U	+	++	+++			+	++	+		
47	Radius	S-C	L	++	++				+	+			
48	Radius	S-C	U	++	+++	++	+		++	++	+		Open-R
49	Ulna	S-O	M	++	++	+	+		++	++	+		Open-R
50	Fibula	S-O	U	+++	+++					+++	+		

genograms afterwards. The results we believe apply to other bones as well as to these, although they cannot be so readily shown.

Charts—In the first group, all reduced within four hours after accident, there are 50 cases. The chart (Fig. 3) summarizes the results. Each circle with the cross within it represents a perfect architectural reduction. There were 26 such reductions or a percentage of 52. In the remaining cases in this group the predominating post-reduction displacement was a slight off-set. Most of these reductions were considered satisfactory, and good functional results were obtained, but they could not be classified as perfect. No second reductions were necessary, and one complete debridement was performed.

In the second group there are 29 fractures. All were reduced in from four to twelve hours following the accident (Fig. 4). The perfect results as represented by the circle and cross comprise

FIGURE 6

REDUCED WITHIN 24–48 HOURS

No.	Bone	Type	Site	Displacement: Before Reduction: Overriding	Offset	Angulate	Rotation	After Reduction: Perfect	Overriding	Offset	Angulate	Rotation	
1	Tibia	S-C	L	+++	+++	+++	+++			+			
2	Fibula	S-O	L	+++	+++	+++	+++			+			
3	Radius	S-C	L	++	+++	++				+			
4	Humerus	S-O	M	++	+++	++				++			
5	Radius	S-C	L		+	+		⊕					
6	Tibia	Cm-C	U	+++	+++	+	++			+			Skeletal-T
7	Fibula	Cm-C	U	+++	+++	+	++			+			Skeletal-T
8	Tibia	Cm-C	U	+++	+++	+	++			+			Skeletal-T
9	Fibula	Cm-C	U	+++	+++		++			++			Skeletal-T
10	Humerus	S-C	M	+	+++	+++				++	+		
11	Radius	Cm-C	L	++	+++	++				++			
12	Ulna	Cm-C	L	++	++	++				+			
13	Femur	S-C	U	++	++	++				++			
14	Femur	S-C	U	+	++	+			+	++			
15	Tibia	S-T	L		++					+			
16	Fibula	S-C	L		++					+			
17	Humerus	S-C	M	++	++	++				+	+		
18	Tibia	S-C	L	++	++					+			
19	Radius	S-T	U	+	++	+++			+	++			
20	Ulna	S-T	U	++	+++	++			+	++	+		
21	Radius	S-T	M		++						+		
22	Ulna	S-O	M	++	++	+				+			
23	Femur	S-C	M	++	+++	++			+	++	+		Skeletal-T
24	Radius	S-T	L	+++	+++	+				+			
25	Ulna	S-T	L	+++	+++	+		⊕					
26	Radius	S-T	M	+++	+++	++				++	+		
27	Ulna	S-O	M	+++	+++	++				+			
28	Femur	S-T	U	+++	+++	++				+	+		
29	Femur	S-C	U	+	++	++				+			
30	Humerus	S-T	U	++	++	+++			+	+	++		
31	Radius	S-T	L	+++	+++	++				++	+		Open-R
32	Radius	Cm-C	L	+++	+++	++				+			
33	Ulna	S-C	L	++	+++	++				++			
34	Femur	S-O	M	++	+++	+			+	++			Open-R
35	Femur	S-T	U	++	+++	++				+	+		
36	Humerus	S-T	U	++	+++	+				+			
37	Femur	S-T	M	++	+++	++	++		+	+			
38	Humerus	S-O	U	+++	+++	++			++	++			
39	Humerus	S-C	L	+++	+++	++				+			
40	Humerus	S-C	M	++	+++	++			++	++			Skeletal-T
41	Femur	S-C	U	+	++	+++			+	+			
42	Humerus	S-C	L	+++	+++	+++			+	++	+		Skeletal-T
43	Tibia	S-C	U	+	++	+++			+	++			
44	Femur	S-C	U	+++	+++	++	+		++	++			Open-R
45	Radius	S-C	L	+	++	++			+	+	+		
46	Tibia	Cm-C	L	++	++	++				+			
47	Fibula	S-C	L	++	+++	++			+	+			
48	Tibia	S-C	M	+	+++	+	+		+	++			
49	Fibula	S-C	M	+	++	+			+	+			
50	Tibia	S-C	M	++	+++	++	+		++	++			

only 27.5 per cent of the group, a considerable decrease from the first group. There were still no second reductions.

Group three consists of 50 cases, manipulated in from 12 to 24 hours. Only seven, or a percentage of 14 could be classified as perfect. The degree of displacements following reduction was greater as designated by the increasing number of crosses. (Fig. 5). It was necessary to perform second reductions in four cases and four subsequent open reductions.

Fig. 6 shows the fourth group of 50 fractures reduced in from 24 to 48 hours. Here the percentage of perfect reductions has dropped to four while the degrees of displacements following reductions has become still more marked. Two subsequent open reductions were performed and seven were placed in skeletal traction.

FIGURE 7

REDUCED WITHIN 48–72 HOURS

				Displacement									
				Before Reduction				After Reduction					
No.	Bone	Type	Site	Over-riding	Offset	Angu-late	Rota-tion	Per-fect	Over-riding	Offset	Angu-late	Rota-tion	
1	Femur	S-C	M	+++	+++	++				++	++		
2	Humerus	S-C	L	+	++					++			
3	Radius	S-C	L		+	++				+			
4	Tibia	S-C	M	+++	+++				+	++			
5	Fibula	S-C	M	++	++				+	+++			
6	Femur	S-O	M	+++	+++	+			+	+			
7	Tibia	Cm-C	M	++	++	+				+	+		
8	Fibula	S-O	M	++	+++	+				++			
9	Fibula	S-O	L	+	+++	+				+			
10	Humerus	S-C	U	++	+++	+++				++			
11	Tibia	S-O	L	++	++	+			+	+	+		
12	Fibula	S-O	L	++	+++	++				+	+		

FIGURE 8

REDUCED WITHIN 72–120 HOURS

				Displacement									
				Before Reduction				After Reduction					
No.	Bone	Type	Site	Over-riding	Offset	Angu-late	Rota-tion	Per-fect	Over-riding	Offset	Angu-late	Rota-tion	
1	Humerus	S-T	L	+	+++	++				+	+		
2	Tibia	S-O	M	++	+++	++	+		+	++			Skeletal-T
3	Fibula	S-O	M	++	+++	++	+		+	++			Skeletal T
4	Tibia	S-O	L	+	++	+	+		+	++			Skeletal T
5	Fibula	S-O	L	+	++	+	+		+	++			Skeletal T
6	Tibia	Cm-C	M	++	+++	++	+		++	++			Skeletal T
7	Fibula	S-C	M	++	+++	++	+		++	++			Skeletal T
8	Tibia	Cm-C	M	++	+++	++	+		++	++			Skeletal T
9	Fibula	S-C	M	++	+++	++	+		++	++			Skeletal T
10	Femur	S-C	U	+++	+++	++	+		+	+	+		
11	Fibula	S-O	L	+	++					+			
12	Tibia	S-C	M	+++	+++	++			++	+++			
13	Fibula	S-C	M	+++	+++	++			++	+++			
14	Radius	S-C	L	+++	+++	++				+			
15	Humerus	S-C	M	+++	+++	++			+	++			
16	Radius	S-C	L	+++	+++	++			+	++			
17	Ulna	S-C	L	++	+++	+			+	++			
18	Humerus	S-T	L	+++	+++	+++	+			+			
19	Femur	S-C	L	++	+++	++	+		++	++	+		
20	Femur	S-T	M	++	+++	++			+	++			Open-R

The 48 to 72 hour group was small. Although consisting only of 12 cases, Fig. 8, shows conclusively the increasing imperfectness of reductions. There were no perfect reductions.

Figs. 8 and 9 are those manipulated after 72 hours. These two groups represent 37 fractures and their reductions only emphasize our increasing difficulty. Six required open reductions following, while eight were placed in skeletal traction subsequently.

In summarizing these groups (Fig. 10) one is immediately impressed with the rapid decrease in perfect reductions following the first four hours. After 24 hours there were very few. The degree of displacements following manipulation of the fractures, becomes progressively more marked, depending upon the time elapse, and therefore the number of subsequent second reductions, open operations, and traction becomes more numerous.

Analyzing these fractures from the standpoint

FIGURE 9

REDUCED WITHIN 120 PLUS HOURS

				Displacement									
				Before Reduction				After Reduction					
No.	Bone	Type	Site	Over-riding	Offset	Angu-late	Rota-tion	Per-fect	Over-riding	Offset	Angu-late	Rota-tion	
1	Radius	Cm-C	M	+++	+++	++			+++	+++			Open-R
2	Ulna	Cm-C	M	+++	+++	++			+++	+++			Open R
3	Humerus	S-C	L	+	++	+++				+	++		
4	Humerus	S-C	U	+++	++	++			++	++			
5	Radius	S-T	L		++	+++					+		
6	Radius	S-C	L	+	++	++			++	++			Open R
7	Ulna	S-C	L	++	+++				++	++			Open-R
8	Radius	S-T	M		++	++				++	+		
9	Tibia	Cm-C	M	+++	+++	++			++	++			
10	Fibula	S-C	M	++	++	++			+	+			
11	Tibia	Cm-C	M	+++	+++	++			++	++			
12	Fibula	S-C	M	++	++	++			+	++			
13	Humerus Femur	S-C	M	++	+++	++	+			++			
14	Never	S-C	L	+++	+++	++	++		++	++			
15	Tibia	S-O	L	++	++	+	+			++			
16	Fibula	S-O	L	++	++	+	+			++			
17	Humerus	S-C	M	++	+++	+			+	+++			Open-R

FIGURE 10

SUMMARY OF REDUCTIONS

Time in Hours	0–4	4–12	12–24	24–48	48–72	72–120	120+
No. Cases	50	29	50	50	12	20	17
Perfect	52%	27%	14%	4%	0	0	0
Overriding	10%	10%	16%	34%	33%	80%	64%
Offset	42%	72%	78%	94%	100%	100%	94%
Angulation	14%	7%	22%	28%	33%	15%	12%
2nd Reduct.	0	0	4	0	0	0	0
Open Reduct.	0	0	4	3	0	1	5
Traction	0	0	1	7	0	8	0

of the bones broken, Fig. 11, we find, of those reduced within the first 12 hours, only 13.9 per cent were of the femora or humeri. In the group reduced in from 12 to 48 hours 35 per cent were femora or humeri. While these bones made up 30.6 per cent of the group after 48 hours, these results clearly demonstrate that the ambulatory case is treated earlier than the others. The delay in immediate treatment of fractures of the femur or humerus is due to the unavailability of trained personnel and equipment in the average general hospital for emergency service.

The point here might arise that it is difficult to compare fractures of the various bones as their problems in treatment are not exactly the same. For that reason we have tabulated the forearm separately (Fig. 12). We find that although the percentage of perfect reductions may be slightly higher in the main the results are the same, and the same deductions can be made from this group.

CONCLUSION

A critical analysis of 228 major displaced fractures has been presented. Study both before and after reduction clearly demonstrates that the most perfect reductions are obtained immediately following the accident. The percentage of perfect reductions drops very rapidly until the 24 to 48 hour group only showed 4 per cent. After 48 hours, no perfect reductions were obtained. The

FIGURE 11

BONES FRACTURED

Time in Hours	0–4	4–12	12–24	24–28	48–72	72–120	120+	Total
Radius	27	13	14	10	1	2	4	71
Ulna	11	8	7	6	0	1	2	35
Tibia	5	0	6	9	3	5	3	31
Fibula	4	0	7	6	4	6	3	30
Humerus	2	6	9	9	2	3	4	35
Femur	1	2	7	10	2	3	1	26
Total	50	29	50	50	12	20	17	228

First 79	Humerus and Femur	11	13.9%
Second 100	" " "	35	35.0%
Third 49	" " "	15	30.6%

increasing difficulty with reductions, together with increasing degrees of displacement following reduction as the time elapse increases, is caused by: first, the congealment of the hemorrhage about the fracture site; second, the increasing edema of the soft parts about the fractured ends, and; third, the muscle spasm of the surrounding muscles. All three of these factors are of little or no importance in early reductions.

FIGURE 12

FOREARMS

	Radius				Ulna			
Time in Hours	No.	Perfect		%	No.	Perfect		%
0– 4	27	19		70	11	7		63
4–12	13	6		46	8	1		11
12–24	14	3		21	7	1		14
24–28	10	1		10	6	1		17
48–72	1	0		0	0	0		0
72–120	2	0		0	1	0		0
120 plus	4	0		0	2	0		0
Total	71				35			

Although we all recognize that slight off-sets or displacements often give perfect functional results, nevertheless our aim should be a perfect architectural reduction.

If improved reductions are to be sought then the "Ideal Time for Reduction" is as soon after injury as the condition of the patient will warrant. This makes most cases emergency ones.

Early reductions will minimize the necessity for second manipulations, and will reduce the number of subsequent open operations.

Early adequate reductions will prevent the troublesome swelling which often follows.

In many cases with serious complicating injuries, local anesthesia will save time.

The importance of early reductions applies equally to other bones.

How can we improve the fracture service in our hospitals to facilitate early reductions?

(1) Adequate first aid with proper splintage. Many a fracture has been reduced in the emergency room before the swelling has appeared.

(2) The hospital X-ray service should be placed on an emergency basis. This also applies to the use of the flouroscope for reduction, and checking of position.

(3) The fracture room service should be available at all times.

(4) The doctor should treat the fracture as an emergency case.

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The severing of a ureter during hysterectomy was not recognized at the time of operation. Extravasation resulted, with infection. The ureteral plight was diagnosed with retrograde injection of opaque solutions into the ureteral orifice. The extravasation was drained by lumbar incision, but nephrectomy was impossible because of the patient's poor condition. But, Believe-It-Or-Not, the patient recovered completely, and later cystoscopic study revealed spontaneous anastomosis of the ureter.—Ralph L. Dourmashkin, New York.

DEHYDRATION TREATMENT OF PREGNANCY AND ITS RELATED TOXEMIAS

By GORDON L. ERBAUGH, M.D., DAYTON, OHIO

IN REVIEWING past literature and noting the astounding incidence of eclampsia and the rather discouraging results obtained by various types of therapy, chief of which has been the ever-popular practice of forcing fluids on the patient suffering this symptom-complex, we turn readily to a procedure which has a very definite appeal because of its sound physiological rationale and its unquestioned ability to reduce the incidence of this entity appreciably in our obstetrical records.

In 1928 Doctors Arnold and Fay of Temple University, in their experimental work on dogs were able to produce generalized somatic clonic convulsions, such as we have all seen in the eclamptic, by literally "waterlogging" the tissues of these animals. The pathological findings observed at necropsy were essentially those of cerebral edema from any hydration state such as is found in acute alcoholism and other terminal toxic states. It was found by exploration during the terminal stages of eclampsia that the brain is anemic, grayish white, markedly edematous and associated with this frequently are excessive amounts of extra arachnoid and sub-arachnoid cerebrospinal fluid. Histologically there is observed marked edema, enlarged perivascular lymph spaces, and frequently scattered punctate hemorrhages as well as focal or extensive recent sub-arachnoid hemorrhage.

The control of the terminal cerebral symptoms —headache, nausea, vomiting early, and stupor convulsions and respiratory failure later, that accompany cerebral edema and increased intracranial pressure from any cause, have long been problems to neuro-surgery and the methods of treatment derived from recent research in combating these symptoms are directly applicable to the treatment of eclampsia.

This routine of treatment includes methods long known and accepted. The success obtained has been primarily due to the establishment and prolongation of the temporary benefits formerly derived from such dehydrating measures such as purgation, diaphoresis and blood letting. In attempting to carry out limitation of fluid intake it is of course necessary to abandon the old belief paramount for the past half century, that great amounts of fluid are necessary to dilute or "wash out the toxins" and to recognize the fact that many of the so-called "toxic" symptoms are produced by the excessive intake of fluids to the point of induction of "water intoxication".

Irrespective of the underlying vaso-spastic and renal-hepatic disturbances there is a super-added "water intoxication" resulting in a clinical type of cerebral hydration and a terminal sequence of events characterized by convulsions, stupor and eventually respiratory failure. With the control of this factor according to physiological methods now at hand it is our belief that the therapeutic art is capable of directing proper treatment toward the underlying etiology. Even in well established chronic nephritics it has been possible to protect the patient against the almost inevitable eclampsia by careful management and watchful attention, directed toward her cerebral physiology and water balance.

Despite the widespread belief that large quantities of fluid are necessary in renal insufficiency in has been well established within the past five years that symptomatic improvement follows fluid restriction, and signs of renal irritation have improved or at least remained stationary under long continued dehydration. Contrary to popular belief it has been found recently that 8 to 10 ounces of urinary output per day is sufficient to properly eliminate solids, provided the ability of the kidney to concentrate is retained as evidenced by the maintenance of a high urinary specific gravity. Arguments in favor of placing a pathologically involved renal system at partial physiological rest has been borne out by clinical experience with other organs, such as the lungs and heart. To force the renal mechanism to its utmost during periods of decompensation seems as unsound a principle as would be the enforcement of violent exercise on a decompensating heart.

Disregarding the renal factor, it is evident that the total fluid intake must find some avenue for escape to maintain proper physiological relationships. The avenues of escape are of course skin, breath, intestinal tract and kidneys. If there is suppressed renal function it is evident that the remaining avenues of escape must compensate to maintain proper balance else there will inevitably be an excess water retention in the tissues. The volume of moisture dissipated through the lungs varies somewhat with body temperature and respiratory rate, but for clin-

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ical purposes remains approximately fixed. The compensatory load therefore is placed upon the intestinal tract and the skin. Variability of skin function is determined by environmental and temperature relations, activity of patient and induced states of physiological activity. Character of bowel movements is an index as to fluid loss by this route. If diarrhea supervenes, compensation may be possible for excessive amounts of fluid unable to escape in the usually available skin and renal routes. Vomiting may be induced due to central mechanisms operating to eliminate excess fluid. If vomiting be continued there follows of course an alkalosis due to the gross loss of gastric hydrochloric acid. This, according to the work of Lennox and Cobb, is a corollary of edema, bringing forth a state of tissue bound fluid, which if contained in the cerebral tissues, may be followed by symptoms of headache, dullness, stupor and convulsions.

Surrounding the problem of water metabolism lies a need for a careful analysis of the relationship between the intake and output of patients with recognized renal deficiency. Clinically it is possible to measure accurately the fluid intake and to establish a diet relatively fixed in its water content and thus the known quantities entering the body can readily be established. The measuring of urinary output in conjunction with the daily weight will establish the relative storage or elimination of fluids ingested. Then, if a patient whose intake and output have balanced each day shows a gain in weight, it is evident that fluid derived elsewhere has been stored within the tissues, and conversely, with an established fluid intake and output balance, loss of weight indicates a loss of stored tissue fluids through other than renal channels.

Regarding dietary regimes of preference in combating tissue fluid retention it must be noted that carbohydrate metabolism requires two-thirds more water than does a protein maintenance. It is also believed that sodium chloride favors water retention due to the fixed base sodium. Hence in maintaining proper fluid balance it is essential to eliminate excessive carbohydrate foods and to rely upon the ordinary foods and vegetables for this factor. Also a salt-poor diet is to be desired in furthering dehydration.

The routine orders on eclamptic cases at Miami Valley Hospital are as follows:

1. Restriction of all fluids in patients with a systolic pressure of 160 or above—B. P. q. 4 hrly.
2. 50 cc. of 50 per cent Glucose intravenously q. 4 hrly.
3. Urinary output measured each 24 hrs.
4. 10 cc. of 25 per cent Magnesium Sulphate intramuscularly q. 1 daily.
5. Convulsions controlled by:
    1. Rectal administration of chloral and bromides in a 15-30 gr. mixture per drachm. P. R. N.
    2. Spinal puncture P. R. N. to relieve intracranial pressure in extreme convulsive cases.
    3. Avoidance of Morphia-Respiratory Depression.
    4. Avoidance of all Barbiturates—because eliminated by a liver probably already suffering toxic changes and tends to increase cerebral edema.
    5. Blood Chemistry q. 48 hrs.
    6. If convulsive state controlled—fluids given to balance output per 24 hours.
    7. Verafrim Viridi P. R. N. for control of blood pressure until controlled by dehydration.

As to prenatal care it is my practice to institute dehydration as soon as it is determined that a patient is pregnant. She is immediately told to limit her total fluid intake to one ounce per ten pounds in weight, going no lower than fifteen ounces to any one patient and using a maximum of 32 ounces, and to check the weight and urinary output each two weeks, bearing in mind any increase in weight should be treated with drastic dehydration, unless it is within the maximum increase in weight of 25 pounds for the pregnancy.

The following statistics were obtained from Miami Valley Hospital record Obstetrical Department covering period of ten years. For comparison the period from 1927 through 1932 covered a period of various treatment of eclampsia and toxemia. The period of 1932 to 1937 covered a period of dehydration treatment of eclampsia and related toxemias.

Total cases	183	
Before 1932	95	
After 1932	88	
White	176	
Black	7	
Average age	27	
Top age	43	
Low age	17	
No. above 30	70	
No. below 30	113	
Public	63	
Private	120	
Hyperemesis Gravidarum	18	after '32, 47
Tox "	6	" 0
Pre "	33	" 26
Ec "	29	" 14
Neph "	7	" 1
Others	2	
Maternal Deaths, Total	19	
Before '32		after '32, 4
Infant Deaths	62	
Before '32		after '32, 23

2150 E. THIRD STREET.

DISCUSSION

Karl W. Horn, M.D., F.A.C.S., Dayton, Ohio: The dehydration treatment of eclampsia is certainly in marked contrast to that which has pre-

I wish to thank Dr. J. O. Arnold, Department if Obstetrics, Temple University, and members of the Obstetrical Staff of Miami Valley Hospital, and my associate, Dr. Paul Troup, and also Drs. C. B. Stuhlman and F. Englerth for their preparation of statistics.

viously been followed. There must be an unknown something which exists in the toxemias of pregnancy which is not present in other cases of toxic nephritis, otherwise our theory and treatment of nephritis would be totally wrong today.

I do not believe that the kidney is primarily responsible for the onset of the pathology in every case, because we all know that the kidney must be satisfied with whatever water is left after all other functions of the body have been provided for. For this reason, it is given the power of concentration. If the body tissues withhold fluids, then there is less available water for the kidney, and its function becomes labored. In eclampsia, the body tissues are withholding fluids with resulting cerebral edema, etc. Resting a kidney does not mean withholding available water from the kidney, because it is much easier for a kidney to excrete 50 grams of waste products with 3,000 grams of water, than it is with only 600 grams.

In patients whose fluids are restricted, urinary excretion proceeds with one of three results. First, if sufficient water is left, the kidneys, because of their concentrating power, may excrete all the waste products presenting and thereby avoid both retention of wastes and dehydration of the body. Secondly, when the difference between the inflow of water and the exits of water, other than the kidneys, is so small that the latter can no longer eliminate all the wastes with this amount of water, even at the maximum concentration, then the kidneys draw upon the body stores of water. Under these conditions, retention of wastes is avoided but dehydration occurs. Finally, if the body stores of water are seriously depleted, there may be insufficient water for even normal kidneys, with their high concentrating ability, to excrete the normal amount of solid wastes. Then not only dehydration occurs, but also retention of wastes.

In the Arnold treatment of eclampsia, the intravenous injections of 50 per cent glucose or sucrose solution is recommended. A great many individuals believe that this hypertonic solution produces renal stimulation, but this is not true. The physiological reaction, which follows the intravenous injection of 50 c.c. of 50 per cent glucose solution, is the dehydration of the body tissues to the extent of approximately 1,000 c.c. This water is pulled into the blood stream and thereby becomes available water for kidney excretion.

I do not believe that dehydration should be continued over a lengthy period of time, because kidney function will most surely pay for its prolonged effort to concentrate the urine. If the eclamptic individual has a co-existing pyelitis of pregnancy, the prognosis will not be so hopeful for early recovery.

The Arnold method of treatment undoubtedly has its limitations to the extent of reducing cerebral edema and hypertension, but I feel that some distinction must be made between eclampsia alone, and when associated with renal disease.

A woman simulated a kidney colic and claimed to have passed a stone. She carried her own calculi; they were pieces of brick, fusiform in shape. Believe-It-Or-Not, examination revealed that she actually had a stone in each kidney pelvis.—Nelse F. Ockerblad, Kansas City.

Secondary Low Blood Pressure

This is the patient who, when he presents himself to the physician, is frequently told that everything is all right except his blood pressure, which is a little low, but that is nothing to worry about. It is true that the superficial examination given most patients will not often bring out the etiological factor of hypotension. Among these diseases are:

Tuberculosis: Patients who present themselves for physical examination giving a history of tuberculosis in the family or contact with a tubercular patient and in whom no other finding other than low blood pressure is found should be investigated further. Obviously these patients should have an X-ray examination of the chest. It is a known fact that low blood pressure is almost a constant finding in tuberculosis.

Anemia, secondary: The cause of low blood pressure here is obviously the reduced volume of the blood. The cause of the anemia should be found and eradicated.

Chronic focal infections: Here the low blood pressure is due to a myocarditis. The foci of infection should be found and treated.

Pituitary adenomas: In patients with chromophalic adenomas of the pituitary the systolic pressure is usually low. Cushing found it to be below 100 mm. of mercury in 11 per cent and below 1.10 mm. in 46 per cent of his 200 cases. This diagnosis is made by an X-ray examination of the sella turcia.

Hypofunction of the thyroid: This type person is usually obese. His basal metabolic rate is usually found to be between a minus ten and a minus thirty. Here the diagnosis is made by the basal metabolism test.

Hypofunction of the adrenal or hypoadrenia: Addison's Disease: In this condition the systolic blood pressure is often as low as 70 mm. in mercury. This diagnosis, of course, is established by the typical bronzing of the skin and other classical symptoms of Addison's disease.

Hyperinsulinism: These patients almost always have a low blood pressure. The diagnosis here is best established by the blood sugar test.

Briefly summarized the points are: First, low blood pressure is a common cause of ill health and it is too frequently disregarded by the physisian. Second, hypotension may frequently be a contributory factor in arterial thrombosis. Third, idiopathic hypotension in patients with an asthenic habitus is not often cured. These patients should not be subjected to surgery. Fourth, patients presenting themselves to a physician for examination and found only to have a low blood pressure are entitled to and should be further examined to determine the cause of their low blood pressure and, in turn, the cause of their ill health.—John M. Samuel, M.D., Little Rock; Jour. Ark. Med. Soc., Vol. XXXV, No. 6, Nov. 1938.

INFANTILE ECZEMA

By EARL H. BAXTER, M.D., COLUMBUS, OHIO

INFANTILE eczema with its frequency, persistence and multiplicity of lesions, is a constant source of worry and anxiety to the physician. The scaling or exuding reddened face of an otherwise well infant is unsightly, exciting pity or perhaps repulsion instead of affection. The exhibition of such an infant is a cause of great concern to the parents. It not only arouses their greatest sympathy but piques their vanity as well.

It is not within the scope of this paper to discuss this condition exhaustively or to present it from the standpoint of a dermatologist, but in the light of one who must view the child as an entity. An attempt will be made to present a simple tangible classification on the basis of etiology and the suggestion of dietetic and therapeutic procedures designed to meet these causes and maintain an eczema free infant.

Until recent times eczema has been a term to cover all those eruptive diseases of infancy for which no definite cause could be determined. From this group, occasionally, certain diseases as scabies, impetigo, etc., with significant etiology and symptoms have been drawn, leaving the rest still a kind of dermatological "scrap heap".

Infantile eczema may be defined as an eruptive disease of infancy and early childhood characterized by polymorph lesions consisting of erythema, scaling, papules or vesicles and accompanied at times by itching.[1] This includes eczema in its broadest sense and may be said to be the untoward reaction of the infant to his environment. To the pediatrician this means the reaction of the infant, as evidenced by a skin manifestation to an exudative diathesis rather than the reaction of the skin alone. This may be a reaction to a dietetic factor as fat or sugar in minor cases, protein or more obscure foods in the more severe and major forms; or to infectious agents and materials with which he comes in contact externally.

The many forms of eczematous lesions have given rise to different names, irrespective of areas involved or etiological factors. In addition terms have been used to denote the area affected, its duration, its symptoms or the causative factor. All this increases the confusion of the physician. Such terms as erythema, papular and weeping, intertrigo, seborrhea, allergic, contact, exfoliative dermatitis, and infectious eczema are only a few of a large group. It is easy to indicate the necessity for a concise classification which must include both the etiology and morphology. Although it has long been recognized that many cases were seborrheic in character, yet few attempts were made to differentiate them from other types of eczema. Hill[2] in 1933 elaborated upon Moro's earlier grouping and developed one of the few practical classifications.

1. Seborrheic dermatitis.
2. Eczematous fungus infections.
3. Allergic dermatitis
   A. Contact dermatitis
   B. Atopic dermatitis
4. Mixed.

"Infantile eczema" is thus made to include seborrheic dermatitis, erythrodermia desquamativa and true eczema. This last contains a possible fungoid type and an allergic form including both contact and atopic forms. Since it is not unusual to find combinations of these types in any particular case, there may arise much difficulty in adhering strictly to this classification.

On the basis of the preceding classification, the most common form and that occurring at the earliest age is seborrheic eczema. Characterized by scaling to crusted areas any place on the body, and by moderate itching, it usually develops on the forehead and cheeks as an apparent extension from the scalp. There is nearly always found some evidence of "Cradle Cap". In milder cases there may be only small intertriginous areas behind and under the ears, or in the neck folds, or by a mild redness or dryness of the cheeks. Too often this last is interpreted as a sign of excellent nutrition. Although usually due to some type of disturbance of fat metabolism, sugar may also be at fault either directly or as a contributory factor to the fat imbalance. In addition, it is believed there may be some pyogenic infectious process since it reacts quite favorably to parasiticides. György[3] believes it to be due to a Vitamin H deficiency and the toxic

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action of absorbed split lactalbumin. This theory may explain those cases with a complicating allergic form if the atopic substance is a lactalbumin derivative.

This form may be differentiated from the allergic by absence of eosinophilia and its improvement on low fat and possibly decreased sugar intake. Occasionally it may be confused with a syphilitic eruption, but this involves the middle third of the face, that is, angles of the nose and mouth, while seborrheic eczema attacks the outer thirds. Furthermore, the syphilitic infant rarely presents the good nutritional state of the eczematous one.

External treatment consists of cleansing with oil instead of soap and water. Topical applications are of value by protecting from the air, allaying itching, destroying infection and stimulation especially in the presence of oozing. Two to five per cent ammoniated mercury, phenol, weak coal tar, and salicylic acid and sulphur preparations will be found satisfactory in practically all cases.

The diet should be low in fat and carbohydrates. This can be obtained quite easily in the artificially fed child, by the use of partially or completely skimmed milk. The amount of sugar should be reduced along with the fat until the skin and scalp are clear. Later these substances should be increased cautiously with a rapid return to the preceding strength whenever a recurrence of the eruption appears. However, in the breast fed infant the reduction of the fat is more difficult. It can be accomplished best by increasing the intervals between feedings or by giving moderate amounts of casein flour as casec, larosan or protolac before the nursing and thus eliminating the last milk in the breast which is relatively high in fats. Goat milk may be of value because of the slight difference in type and quantity of fat and protein. This will be found of more value in the milk allergic complications. Two to six weeks are required to clear the skin with very little tendency to recurrence after the sixth or eighth month.

True or allergic eczema constitutes about 75 per cent of all cases either alone or in combination with some other form. Characterized by a marked tendency to recur, it may begin from birth through late infancy into childhood, and is found in both the well and poorly nourished infant. It is truly the reaction of the infant to his environment—an atopic or antigenic reaction to various food substances or contact materials.

Heredity undoubtedly plays an important role with some forms of familial allergy as migraine, eczema, urticaria, hay fever or eczema being present. However, not infrequently cases are encountered without any such history. In such instances there may be a latent heredity or sensitization occurs as a result of some overwhelming dose of the atopic substance with resulting destruction of tolerance.

Any area of the body may be involved, indeed cases of generalized allergic eczema are common. The cheeks, chest and extremities are the more frequently affected regions in acute cases in infancy. In the more chronic forms, or in older infants and children, certain areas persist. Especially is this true of the back of the wrist, the flexural surfaces of the knees and elbows, the cheeks and back of the neck. There may also be small annular spots on the face or chest as the only evidence. Many such children show a definite tendency to ichthyosis which makes the recovery all the more difficult. True eczema in infancy may be followed by asthma or allergic rhinitis in later childhood. The same exudative background obtains in both instances with the skin being involved at the earlier age and the mucus membranes at the later period.

The type of lesion runs the gamut from small erythematous areas to ulcerative, crusted lesions frequently with a superimposed pyogenic infection. However, the original damage is probably a papule, with the characteristic severe itching followed by scratching. The infiltration, fissuring and pustulation may not be the primary eczema but only a secondary manifestation. The eosinophilia differentiates it from the seborrheic type and indicates its definite relation to other forms of allergy.

The successful treatment of infantile eczema begins with a complete and satisfactory history and physical examination. If there is not sufficient time for all of this at the first visit a second should be employed to obtain the allergic background. Since it has been shown that a child may be sensitized through the placental circulation, an investigation of the mother's dietary habits may often reveal some dietetic idiosyncrasy during pregnancy related to an allergic reaction in the infant. (4) The presence of allergic conditions as asthma, hay fever, migraine, etc., should be elicited. The relation of the appearance or aggravation of the rash to the administration of any new food should be observed, keeping in mind, however, that many days may be necessary before the rash appears. This should also include the introduction into the infant's environment of feathers, new bedding, silk or wool, and animal pets. A similar study of previous methods of treatment including local applications with results should be made.

Determination of the offending substances, both food and contact, may be made by the elimination process. If only one or at most two foods or materials are at fault, these may be found eventually. However, it is a long and tedious process frequently unattended by success. It may be recalled that orange juice, eggs, milk, chocolate and wheat are the most common food

causes, while feathers, silk, wool, and orris root are the usual contact irritants. Hence an elimination of these is worth a trial. The possibility of finding the right material is greatly decreased with an increase in the allergens. While the latter increases at an arithmetical ratio, the former increases at a geometrical rate. Skin testing by the scratch, intracutaneous, patch or passive transfer offers the quickest and most certain method. Ordinarily the scratch test is sufficient to obtain most information and should include all foods and those materials coming in close contact with the infant. In the breast fed infant this will include all foods in the mother's diet since sufficient atopic substances may be carried over in the breast milk to produce the rash. However, in many cases of generalized eczema there will be insufficient clear skin for testing, which necessitates either passive transfer tests or the use of elimination diets. In severe or chronic eczema progressive sensitization may occur to new foods and materials, while at times spontaneous desensitization develops. This entails the necessity for repeated testing in marked exacerbations or recurrences in an unchanged regime.

The dietetic treatment consists of the withdrawal of the allergic foods, until the skin has remained clear from rash for one to four weeks. Attempts may then be made to desensitize the infant to the offending foods by the addition of very small amounts of one food at a time increased very slowly until adequate quantities are ingested without a reaction. The same procedure may then be followed with other foods. With the reappearance of the rash, return should be made at once to the preceding diet and additions made later and more slowly. Advance cautiously but retreat precipitously should be the policy in the addition of new foods. Recurrences may occur days or weeks after complete freedom from signs even in an otherwise well infant. They are more common during some intercurrent parenteral infection, or disturbance of metabolism as is found occasionally in teething. Diarrhea is often followed by a temporary improvement due to the dehydration or perhaps to the changed acid-base balance.

Theoretically any case of allergic eczema caused by the diet may be cured by withholding all foods causing trouble. However, this may include so many that the child's nutrition will suffer. Not infrequently one must choose between a poorly nourished eczema free infant and a well nourished babe with slight eczema. The choice must always be the latter since one must view the eczematous child as an entity and not a skin case.

When some protein factor of milk is at fault, use may be made of milk made non-allergic by prolonged boiling of fifteen or more minutes or so treated under pressure. "Hypoallergic" milk is an example of this although in the writer's experience this has not been satisfactory. Canned evaporated goat's milk, now easily obtained and of standard composition, offers the best substitute for cow's milk. Particularly if there is a lactalbumin sensitivity, is goat milk indicated. However, it is of little value in casein allergy because the lactalbumin differs while the casein is the same in cow's and goat's milk. When there is sensitivity to milk proteins of various animals, vegetable milk substitutes as Sobee or Mullsoy are of value.

The skin should be protected from irritation by the use of arm and hand restraints; the use at times of a mask, and by topical applications. The last may be a bland to a stimulating ointment depending on the chronicity of the eruption and the degree of itching; or a lotion in the presence of much exudation. A secondary infection calls for an antiparisitic application.

Since some investigators have suspected a disturbance of acid-base balance in eczema suitable amounts of an alkali as soda bicarbonate or potassium citrate given intermittently for three to five days may prove beneficial. Coincident with this an attempt may be made to limit the fluid and sodium chloride intake especially when marked exudation occurs.

Thyroid medication[5] may be indicated in exaggerated chronic cases, especially in the fat, plethoric child with or without a tendency to ichthyosis. This may be effective also by lowering the water content of the tissues.

In conclusion, it is desired to emphasize the following points:

1. Infantile eczema represents the reaction of the infant and not the skin alone, to his environment.
2. Infantile eczema etiologically may be divided into seborrheic and allergic forms.
3. The allergic form either alone or in combination accounts for 75 per cent of all cases.
4. The allergic substance can best be determined by skin testing with all environmental substances.
5. Successful treatment comprises elimination of the allergens; the reduction of fat and sugar in the seborrheic type; the use of a suitable protective or stimulating ointment, and a gradual desensitization to the disturbing foods.

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DISCUSSION

Berman S. Dunham, M.D., Toledo, Ohio: Dr. Baxter's paper on infantile eczema is a broad and practical exposition with which I can only

agree, emphasize some points, but add very little.

The phenomenon of sensitization is not clearly understood. It apparently occurs from the admission of repeated doses of the allergic substance through some lesion of the lining membrane of the respiratory tract in the inhalent form, through the skin in contact allergens, or through a lesion of the intestinal mucosa in the dietetic forms. In the case of food allergens a gastro-enteritis or a congestion of the intestinal mucosa accompanying a parenteral infection may be responsible for the lesion through which the atopic substance has been introduced. It is a common observation that skin tests in eczema are often unreliable and contradictory, as well as expensive. Nevertheless, these tests should be done when possible in the refractory cases.

It has been shown by O'Keefe, Shannon and others that sensitization to raw egg white may occur directly through the intestinal mucosa which, however, is not permeable to the cooked form of egg albumin. It would seem possible that raw milk protein may do the same thing. In my practice, as a possible prevention of sensitization, only the cooked forms of milk and egg white are given to infants under one and half years of age. This correlates with the often effectual treatment of eczema through denaturizing the protein of milk by prolonged boiling, as advocated by Kerley and others. The vitamin loss, of course, may be amply replaced by the accessory vitamin feedings.

With the evidence of Ratner and others that the infant in utero may be sensitized by allergens in the mother's diet, it may become the added obligation of the general practitioner and the obstetrician to instruct the pregnant as well as the lactating mother to exclude from her diet such items in the raw form as eggs and milk and to avoid over indulgence of certain other proteins.

As one of the most common allergens among the cereals is wheat, I usually substitute this by rice. A most satisfactory formula in eczema, I find, is one prepared from one ounce of rice in one quart of skimmed milk cooked one hour with one ounce of sugar added afterward in the manner of the ordinary thick cereal formula. I heartily subscribe to the plan of maintaining a fair amount of nutrition even at the expense, if necessary, of a slight amount of eczema. In the final analysis the prevention, treatment and management of infantile eczema calls for a high degree of individualization.

A woman of sixty-five had had five unsuccessful operations to close a vesicovaginal fistula. She entered the hospital with severe pain in the left abdomen. She had a large stag-horn calculus in the left kidney, and voided all urine through the fistula. She refused any operative interference. One year later she reentered the hospital with dysuria and pain in the bladder. She had not passed any urine through the fistula in several months. Cystoscopic examination revealed a collar-button calculus in the fistula, which closed it quite effectually. A small loose calculus was removed from the bladder. She appears from time to time for removal of small loose calculi.—Louis Orr, Orlando, Florida.

The Barium Enema in Diagnosis of Pathology of the Colon

The question always arises as to when a barium enema examination is definitely indicated. The Mayo Clinic probably does a larger percentage of these than any other institution in the world. They examine every case, when the patient is over 40 years of age, of secondary anemia in which sufficient cause has not previously been found to account for the anemia. This is because a few carcinomas of the colon are found every year that gave no leads whatsoever except poor general health and socondary anemia. We find a few cases of malignant disease of the colon with no leads whatsoever except that the patient does not feel up to par and wants a thorough examination. In suspected acute intestinal obstruction there is little or no danger for a competent radiologist to give a barium enema to rule out the lesion from the large intestine. The barium enema can be used to localize the point of the ileocecal area in suspected acute appendicitis that is not definite in its symptoms. The barium enema is of little value for the examination of chronic appendicitis. By the time the entire colon is filled to the ileocecal valve the patient is usually so uncomfortable that there is little time and little cooperation by the patient for the roentgenologist to come to a definite opinion regarding this organ. If chronic appendicitis is suspected a barium meal with the patient examined in the horizontal position is by far preferable. Sufficient time and cooperation can be obtained to get a fairly definite opinion of this organ.

Roentgenograms of the colon are of little value except to confirm the roentgenologic findings seen by the radiologist at the fluoroscopic examination. Frequently one or more films are brought to a radiologist of a colon filled with barium for an opinion as to pathology in this viscus. Unless the lesion is outstanding, definite and preferably duplicated on two or more films, a conservative radiologist will seldom volunteer a very definite opinion.

Regardless of the clinical symptoms and other findings, a positive roentgenologic finding by an expert radiologist clinches the diagnosis for the better trained surgical and medical consultants. These specialists accept the roentgenologic findings of the colon by an expert radiologist as the final opinion until the condition is proved to be otherwise.—Claude Moore, M.D., Washington, D. C.; Med. Annals of Dist. of Columbia, Vol. VII, No. 10, Oct., 1938.

One says our art is much to be desired,
Another says it is greatly to be feared.
Our art arouses many murmurs,
But it also prevents many from complaining.
—De Cailly.

CEREBRAL DEBUT OF CERTAIN CASES OF CARDIAC DISEASE

By J. L. FETTERMAN, M.D., and W. F. ASHE, M.D., CLEVELAND, OHIO

DURING the past few years we have seen in consultation and upon the wards of Lakeside Hospital, patients presenting acute mental and neurologic syndromes, the cause of which proved to be subacute bacterial endocarditis. For example, Mrs. M. M., whose case history will be detailed later, presented a picture of visual hallucinations and delusions as the initial, major symptom of her illness. Weeks later further studies established the diagnosis of subacute bacterial endocarditis. Another example was that of a young man of 25, who developed a sudden hemiplegia. Because of the history of minor head trauma and the finding of blood in the spinal fluid, suspicion was directed toward a possible traumatic, intracranial lesion. Here, also, further investigation proved that subacute bacterial endocarditis was responsible for the symptoms.

Interest in this correlation was further stimulated by the occasional occurrence of dramatic mental disorder as the initial or most outspoken manifestation of coronary disease. It was therefore thought advisable to study the frequency and the type of the neuropsychiatric symptoms which appear early in certain heart lesions. In this particular study we are interested primarily in the cerebral onset of subacute bacterial endocarditis.

HISTORY

The subject of subacute bacterial endocarditis already has an extensive bibliography, well documented in Blummer's[1] comprehensive monograph. It will therefore suffice to mention only a few significant publications. The condition was probably first described by Kirkes[2] in 1852 as "Malignant Endocarditis". Then, during the 1860's and 70's, isolated articles appeared. In 1885 Osler[3] published a thorough review, proposing a subdivision into three clinical groups: Typhoid-like, malarial, and cerebral. Harbitz[4] in 1899 contributed excellent pathologic studies, followed in 1903 by Schottmüller's[5] bacteriologic researches. Then, in a series of significant papers from 1906 to 1913 Libman[6] added further clinical and pathological knowledge and proposed the now current designation of subacute bacterial endocarditis.

In the above mentioned papers, cerebral symptoms have been described in detail. Yet, there appears a need to emphasize the frequency with which neuro-psychiatric symptoms occur, as the dominant, early, clinical manifestation. In this paper therefore, attention is focussed upon the mental and neurologic syndromes, which are the early signal symptoms to arouse attention.

*Read at a meeting of the Cleveland Neurological Society, March 23, 1938, Cleveland, Ohio.

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MODE OF STUDY AND MATERIAL

The material for this study includes all cases of subacute bacterial endocarditis on the wards and private service of the University Hospitals during a period of five years from 1932 to 1937. The diagnosis was based upon the febrile course, the presence of an organic, valvular lesion, enlarged spleen, anemia, petechiae, and particularly upon positive blood cultures.

Every chart was carefully reviewed. Attention was directed to the observations of the house staff, cardiologist, and neuro-psychiatrist. In addition, the daily bedside notes of the nurses were carefully searched. Not infrequently, a transient aphasia occurred during the night, was recorded by the nurse, but may have vanished by the following day. In this review of case histories, the searchlight was focussed upon evidence of involvement of the nervous system. The various cerebral symptoms were listed and grouped. The time relationship of the cerebral symptoms to the course of the disease was noted, and those cases in which the first prominent symptoms were mental or neurologic were selected for analysis. These cases were subdivided into psychiatric and neurologic groups, the latter classified into focal and general. The number of cases showing cerebral symptoms may appear unusually high. This is the result of special interest and of the attention to minor symptoms and details which might otherwise be obscured or ignored.

FINDINGS

The significant clinical material is given in tabulated form (See Table I). This table includes the sex, color, age, and symptoms presented by

TABLE I

NEUROPSYCHIATRIC PRESENTING SYMPTOMS

Summary of Cases

No.	Sex	Color	Age	NEUROLOGIC SYMPTOMS		PSYCHIATRIC SYMPTOMS
				General	Focal	
1	F	C	21	Coma		History of Irrational Period
2	F	W	26	Semi-coma	Aphasia Left Hemiplegia	Delirium
3	M	W	20	Headache, Stiff neck, Chills and Fever		
4	F	C	30	Headache, Stiff neck, Fever, Opisthotonus		
? 5	M	W	47	Dizzy spells Headache		Personality Changes
6	F	W	18	Blurring of Vision Headache & Vomiting	Left Facial Weakness	
7	F	W	54	Fainting, Dizziness Severe Drowiness		
8	F	W	14	Profound Lethargy		Disoriented as to Time and Place
? 9	M	W	54	Weakness	Staggering Gait	
10	F	C	27	Stupor		Restlessness and Disorientation
11	F	W	35			Schizophrenic Psychosis
12	M	W	32	Semi-coma		Irrational Temp. 37[6]
13	M	C	21	Severe Restlessness Headache		Personality Changes
14	M	W	22	Semi-coma		Delirium Temp. 37[9]
? 15	M	W	41	Severe Weakness		Mental Torpor
16	M	W	28		Motor Aphasia and Right Facial Paresis	
17	M	W	51		Aphasia. Spastic paralysis. Nystagmus	
18	M	W	49	Headache	Transient Right Facial Weakness	
19	M	W	39		Right Hemiparesis Aphasia & Deafness	Marked Anxiety State
20	F	W	15		Left Hemiparesis	
21	F	W	18	Coma	Right Hemiplegia	

21 patients who presented themselves to the doctor because of cerebral manifestations. Out of the 42 cases studied, in 18 of them cerebral symptoms were marked; in three (indicated by question marks) they were doubtful. It is significant that close to 50 per cent of our cases called the doctor or were brought to the hospital because of a neuro-psychiatric complaint. When the case histories were searched, it was learned that not a few of these patients had been troubled by such general discomforts as lassitude, anorexia, sweating, and may have shown loss of weight for a period of weeks. Nevertheless, these symptoms were unheeded and the individual first called for medical help only after the cerebral symptoms appeared. Because neuropsychiatric symptoms formally announced the presence of illness, it is appropriate to refer to such symptoms as constituting the clinical debut.

As may be judged from Table I, the majority of patients presented general neurologic signs; several showed frank focal lesions; four showed obvious psychotic pictures, and many of the patients showed a combination of general symptoms with their focal and psychiatric disorders.

Among those presenting pure, general symptoms were six patients. Their symptoms included intense headaches, profound lethargy or marked

lassitude or indifference. One patient showed signs of meningitis; another was in a state of coma.

The group of patients with focal, neurologic signs included nine patients, some of whom showed associated mental changes. Among the prominent symptoms were aphasias, facial paralyses, hemiplegias, sensory disorders, and discrete nerve lesions. The psychotic group showed chiefly states of delirium, though two of the patients resembled schizophrenia.

These symptoms will be exemplified by several illustrative case histories.

A. Group I, General: In this group are patients who present symptoms referable to intracranial pathology, who are not psychotic, nor is the lesion focal.

Case No. 1, A. L., a girl of 30, was brought into the accident room of Lakeside Hospital, because of severe headache and stiff neck of 24 hours duration. These symptoms had developed rather suddenly.

The initial examination revealed a stuporous, acutely ill girl, whose temperature was 39°C. and pulse 120. Her head was retracted and neck rigid. The Kernig was positive; no other pathological reflexes elicited. A cardiac murmur was heard, but this observation was not pursued further. The spinal fluid had a cell count of 20 (chiefly polys.) and a four plus Pandy. The smear showed no organisms.

The etiology of this acute meningitis was undetermined until additional history was obtained of possible fever of several months duration and the finding of a positive blood culture. Later, in the course of the illness, an enlarged spleen was palpated and petechiae became visible. The meningeal symptoms decreased in their intensity and the patient was taken home by the family because of the hopeless prognosis which was given. We learned that she had died later at her home.

Case No. 2, B. K., a 54 year old woman, had been suffering from attacks of dizziness and fainting for about two months preceding her admission to Lakeside Hospital. When pallor, shortness of breath, and numbness developed, she first consulted a doctor. Liver therapy was employed because of a suspicion of pernicious anemia. Despite this therapy, the patient grew worse, changing from a vivacious, alert individual into one of apathetic indifference. She became drowsy and listless and would lie for hours without as much as opening her eyes. This disinterest deepened into stupor until she could barely be aroused. At this stage she was brought to the hospital. The physical findings, in addition to the pallor and emaciation, included a slow, horizontal nystagmus, one tiny hemorrhage in the left retina, and a harsh, aortic diastolic murmur. The course was rapidly downhill and she died 15 hours after admission. The autopsy which was limited to the heart, revealed endocarditis lenta, superimposed upon rheumatic, aortic, valvular disease.

B. Group II, Focal: The cases in this group present focal lesions which suggest a cardiac origin because of their probable embolic origin.

Case No. 3, a 39 year old male, came to the Lakeside Hospital in May, 1935, giving a history of sudden weakness and numbness in the right half of the body. The physical examination revealed a right-sided hemiplegia, hemianesthesia, and aphasia. A thorough examination including a search for a source of emboli, proved negative. (The cardiac murmur and other evidences of endocarditis may be absent or missed in certain stages of the disease.) J. M. was discharged as a case of probable cerebral thrombosis, cause unknown.

This patient was followed in the dispensary at infrequent intervals, over a period of two years. During this time he made splendid progress. The leg became stronger, the function of the arm returned, and the speech was greatly improved. In March, 1937, J. M. was readmitted because of sudden deafness and a recurrence of the speech disorder. It was learned that five days previously he was disturbed by a roaring noise in the right ear and temporal headache on the same side. The condition grew worse and the additional symptoms were insomnia, irritability, and sudden outbursts of rage. On the morning of admission, he had been playing with his children when the roaring noise grew louder and louder, culminating in a sensation of a terrific intracranial explosion. Examination in the hospital revealed evidence of the slight residual hemiparesis, motor speech defect, and bilateral nerve deafness. The patient, J. M., seemed disorientated and apprehensive. The lumbar puncture was negative. A routine blood culture, however, later showed a growth of streptococcus viridans. Then, repeated careful listening to the heart revealed a faint murmur. In the course of time, petechiae became visible, the cardiac murmur grew louder, and several positive blood cultures established the diagnosis. This patient was taken home, but was brought back a month later because of decompensation. The course continued downward and the patient finally died. The autopsy confirmed the diagnosis of subacute bacterial endocarditis. Permission to study the brain was not obtained.

Case No. 4, L. A., seen at the Lutheran Hospital in consultation with Dr. P. Shaunessy, is not included in the first table. However, this case is such a striking example of a focal brain lesion as the first symptom, that it is reviewed here. In his childhood this patient had had a mild attack of chorea but no clinical evidence of valvular disease. Thereafter, he enjoyed good health until he began to show some fatigue and loss of weight. These symptoms were so mild that the patient continued to work. One evening upon entering a theatre he accidentally bumped his head against a railing. That evening he had headache. This continued for several days, when there was a sudden convulsion. When he was seen at Lutheran Hospital he was febrile, aphasic, and showed a right sided hemiplegia. The spinal fluid was not increased in pressure and the tap was bloody. In view of the history of the head blow, a traumatic lesion was, therefore, suspected. However, the temperature and rapid pulse suggested a possible infection. A series of blood cultures were taken which proved to be positive for streptococcus viridans. The patient grew worse and died. Pathologic studies by Dr. M. Simon of Lutheran Hospital showed the valvular lesion of subacute bacterial endocarditis and a large hemorrhage in the region of the left internal capsule.

C. Psychosis: The sudden development of a psychosis makes an etiologic diagnosis difficult. The patient loses his ability to observe and may be unable to report his physical symptoms. The

peculiar behavior manifestations make a careful study difficult.

Case No. 5. An example of a sudden psychosis is Mrs. M. M., who was seen in consultation with Dr. J. M. Hindley of Monroeville, Ohio. This patient had been a normal, industrious, well-adjusted housewife until April, 1935. Then she became forgetful, careless, and negligent. In the course of time she grew morose, lethargic, and negativistic. She lost interest in her friends and family, gave up all activities in the home, talked incoherently. She spent a good deal of time "listening to the voices of departed friends." She believed that all her children had been killed and that her home was merely a graveyard. This obvious mental disorder continued for many weeks without any physical complaint. Because of pallor and slight fever, she was referred to Lakeside Hospital for additional study. Then petechiae were observed and blood cultures grew streptococcus veridans. Mrs. M. M. was studied at the Lakeside Hospital for a period of two months during which time she resembled a negativistic form of schizophrenia, entirely indifferent to the environment, perhaps hallucinated but refusing to reveal what her hallucinations were. On her ninth hospital day she developed a transient, external strabismus and at the same time, a positive Babinski reflex. These signs were transitory and disappeared. Later, because of difficulties in the treatment, she was transferred to the Toledo State Hospital, in which institution she died.

D. Exhaustion Mental States: An interesting observation is a rather uniform mental picture which accompanies the terminal stage. After weeks or months of the disease, the patient sinks into marked physical and mental lethargy, is completely disinterested in the environment, and is not even eager for food or drink. This is probably an evidence of physical and mental exhaustion which may be present in other illnesses.

PATHOLOGIC CONSIDERATIONS

The cardiac pathology has been so adequately described by Osler, Libman, and others that we need but mention in passing the typical finding of a verrucous or vegetative process, containing bacteria superimposed upon a previously damaged heart valve.

The pathologic findings in the brain are usually the result of vascular occlusion by infected emboli: minute petechiae, brain abscesses, large and small, brain hemorrhage, encephalomalacia distal to vascular plugs and focal encephalitis. Hassin[7] has emphasized the frequency of arterial changes in the brain from toxic and embolic sources. Bruetsch[8] found in fatal cases, that the brain contained masses of cocci in cortical capillaries and numerous miliary abscesses scattered throughout the gray matter. There is found commonly, chronic passive congestion and edema of the brain associated with, or secondary to congestive heart failure. For a more comprehensive study the reader is referred to the studies of Osler, Blummer, Libman, and Karsner[9].

To explain the symptomatology of subacute bacterial endocarditis, Blummer offers the three factors; toxic, mechanical, and cardiac decompensation. Obviously, the toxic damage from fever and the mechanical as well as infectious nature of the emboli, are by far the most significant causes of the neuropsychiatric syndromes. Associated factors are:

1. Anemia
2. Avitaminosis
3. Cardiac decompensation
4. The mental attitude of the patient towards his illness.

In our group of cases the most important mechanism of the early symptoms is embolism. Emboli may be the cause of the general symptoms and are obviously responsible for the focal, neurologic syndromes. Large emboli may obstruct main cerebral arteries, causing sudden death (Blummer). Smaller emboli may result in hemiplegias and aphasias. Minute emboli may prove symptom-less or may cause trouble, depending upon their site, number, and the reaction which they provide. In the case of L. A., damage to a blood vessel was responsible for the hemorrhage and hemiplegia. In Case No. 1, meningitis developed. In such a case, it is probable that the rupture of the brain abscess may lead to meningitis.

COMMENT AS TO FREQUENCY OF CEREBRAL SYMPTOMS

The apparently unusually large number of cerebral symptoms requires an explanation. It is possible that this frequency is more apparent than real, resulting merely from the fact-gathering interest in the subject. Obviously, if minor weakness and headache be listed as neurologic symptoms, the percentage will be large. Discounting the influence of special search, the percentage of patients presenting early neuro-psychiatric symptoms is clinically significant. It is probable that either toxemia, emboli, a failing heart, or a combination of all three, may find in the brain a most delicate indicator recording cardiac pathology by neuropsychiatric symptoms.

The brain may prove a more delicate indicator of cardiac efficiency or endocardial infection than is commonly recognized. Although changes in respiration and pulse, edema and cyanosis are the usual evidences of cardiac mal-function, yet, instances are not rare in which symptoms of cortical disturbance constitute the earliest or most important symptoms. Recall the cases of Stokes-Adams syndrome in whom attacks of syncope or even epilepsy are in the foreground of the clinical picture. Apparently, in certain individuals the cerebral cortex is so sensitive to a lack of oxygen, that loss of consciousness or other disturbances in cerebral functions may result.

This sensitivity is illustrated by a recent case, A. S., who was seen in consultation with Dr. A. E.

Hannum. This patient, a man of 55, was seized by precordial pain typical of angina. He was given morphine sulphate hypodermically with relief. When the effects of the morphine wore off, he awoke bewildered and confused. He was alarmed by frightening visual and auditory hallucinations. He became entirely disorientated, failing to identify his family or to recognize his home. From day to day, there was no mention of cardiac symptoms. A week after the onset, his behaviour resembled closely a case of delirium tremens. He was brought to Lakeside Hospital about a week after the onset of his anginal attack. The neurologic examination done under great difficulty, was negative. The lumbar puncture showed a pressure of six hundred mm. of water (straining). The chemistry was negative. In the subsequent 48 hours, the patient grew worse and died.

The autopsy revealed a cardiac infarct, diagnosed clinically by the electrocardiagraphic studies of Drs. H. Feil and J. M. Hayman. The brain showed moderate edema and on microscopic examination ischaemic cell change. Similar cases were recorded by Kjaergaard[10], under the title of "Cerebral Symptoms in Acute Myocardial Infarction". This author mentions three cases showing serious mental or neurologic symptoms, including convulsions and coma which were the most signicant manifestation of a myocardial infarct. He attributes these features to insufficient oxygen.

Not only may the cortex be the first region to be affected by cardiac insufficiency, but its function may be first altered by the toxemia of fever. It is well recognized that a convulsion may be the mode of onset of any febrile disease of infancy. Much less frequently, yet almost as dramatically, delirium, stupor, and even coma may usher in a febrile illness in an adult. Some two years ago, one of us (J. L. F.) in consultation with Dr. J. C. Placak, saw a patient who was in a state of coma. Encephalitis was suspected because of the fever and deep lethargy. The neurologic examination and spinal fluid proved negative. Several days later, a pneumonic infection was discovered. It is very likely that the initial symptom was a toxic manifestation of the fever. Practically every physician has seen acute influenzal attacks ushered in by delirium or other mental symptoms. In our patients, it is likely that the combination of fever with possible cardiac insufficiency, plus the frequency of emboli, may have caused the cerebral symptoms which apparently are far more common than in any other infection. The general subject of psychosis in association with heart disease has been discussed by other authors and the reader is referred to a paper by Nolan D. C. Lewis[11]. The factor of anxiety associated with heart diseases is significant but probably it does not play a major role in this group of patients (Schilder[12]). As in other toxic psychoses, the pre-psychotic personality plays a decisive role both in determining the incidence of symptoms and the pattern which they will follow.

CONCLUSION

1. Subacute bacterial endocarditis is a disease whose manifestations are protean and may involve any organ of the body.

2. Symptoms indicative of cerebral disorder not infrequently dominate the picture of subacute bacterial endocarditis, somewhat obscuring the cardiac etiology. In close to fifty per cent of the forty-two cases studied on the wards of Lakeside Hospital, one or more of the symptoms which forced the patient to seek medical aid, were neuropsychiatric.

3. The brain may be a most sensitive indicator of cardiac disorder.

4. We wish to emphasize the concept of the cerebral debut of certain cases of cardiac disease.

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A patient complained of frequent and painful urination. X-ray showed three shadows in the region of the bladder, one of which contained a pin. Cystoscopy showed but one stone, which was crushed and evacuated. A lateral cystogram located the other two shadows in the rectum. Operation revealed a fistula between the lumen of the appendix and the extraperitoneal cavity on the right side of the bladder, in which was the stone containing the pin. The other stone was in the tip of the appendix and it was formed of the same salts. This is apparently the only authentic case of a urinary calculus within the lumen of the intestinal tract.—Burnett Wright, Los Angeles.

THE LIFE HISTORY OF ALLERGY

By SAMUEL R. ZOSS, M.D., Youngstown, Ohio, and MILTON B. COHEN, M.D., Cleveland, Ohio

AMONG the many conditions with protean manifestations which the physician is called upon to treat, none have given rise to more confusion than those classified as the clinical allergies. This is mainly due to the fact that allergic reactions take place in any organ or tissue of the body with the production of symptoms characteristic of the disturbance of function of that organ or tissue. Furthermore, the exciting factor may be and usually is some substance considered harmless, and often, in the case of foods, regarded as quite beneficial. The fact that severe clinical symptoms and even death may result from contact with these substances forces upon us new and enlarged conceptions of the reactions of the body to inflammation and irritation[1, 2]. These conceptions have been adequately discussed by a number of workers recently, and the general principles, useful in the diagnosis and treatment of patients presenting allergic symptoms, are well known. The correlation of the various symptoms, their interpretation, the evaluation of the therapy, however, are difficult and necessitate an intimate knowledge of the disease as it occurs in patients of various ages from the cradle to the grave. Those who are familiar with the disease realize that its manifestations differ in several age groups and in individuals within these groups.

For purposes of discussion, we shall divide all allergies into four large groups, the life history of which we will attempt to sketch biographically, paying special attention to the progress and development of a representative individual of each group throughout his life.

In the first group, the symptoms of allergy begin to manifest themselves early in infancy. The child shows no significant variations from the normal until the third to the sixth week of life, when characteristic symptoms begin to appear. The first of these are colic and regurgitation of food. The pediatrician makes frequent contacts with the baby henceforth. He attempts various modifications of the diet until he finds one which is fairly agreeable. This diet, supplemented by anti-spasmodics, seems to alleviate most of the distressing symptoms and the child shows regular gains in weight. Despite the apparent control of the situation, the baby continues to be a feeding problem and within a few weeks eczema appears. This may vary from a mild diaper rash or slight crusting of the scalp to a universal weeping eruption. Associated with the eczema, there are evidences of neurogenic instability, such as general irritability, increased urination, and changes in muscle tone; the troublesome gastrointestinal symptoms persist. Cherney has referred to this type of child as the one with the "exudative diathesis." Up to this point, the symptoms are almost entirely due to food sensitivity.

At about six months of age, nasal symptoms begin. These are the first evidences of a beginning inhalant sensitivity. They manifest themselves in nasal stuffiness, nose rubbing, thumb-sucking, and mouth breathing, all of which, though troublesome at the time, are not considered especially harmful by either the mother or the physician. During the remainder of the first year there is a moderate increase in severity of the nasal symptoms and the child is said to be afflicted with frequent attacks of naso-pharyngitis[3, 4]. A diagnosis of adenoids is made sooner or later and plans are made to remove the adenoids as soon as a suitable age is reached. The eczema continues on its decline as the respiratory phase increases, and in order to combat this difficulty, the tonsils and adenoids are removed between the ages of eighteen months and two years. Presently, and particularly in the winter, a croupy cough makes its appearance. It is spasmodic in nature and is often associated with wheezing respirations and fever. This cough is frequently confused with whooping cough and the child is subjected to unnecessary quarantine. After the quarantine is lifted, we find as a rule that his siblings have not contracted the highly infectious disease. The nasal symptoms continue although the cough may disappear, but soon another attack of croupy cough appears. Asthmatic bronchitis is often diagnosed at this time, but it is only when the attacks become more

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severe and the wheezing more pronounced that the correct diagnosis of bronchial asthma is made. Three years of age often marks the exacerbation of either the bronchial or nasal symptoms in the summer months during the pollinating seasons of the grasses or the weeds. Our child now has seasonal hay fever. Associated with all these symptoms there are mild gastro-intestinal upsets. The child is a poor eater, shows definite pallor, and under-nourishment, and probably has received by this time a variety of tonic and vitamin products. If we should examine him at this time the significant findings might be grouped as follows:

1. Physical examination—
   a. A thin boy, short for his age, and light for his height.
   b. The skin is dry and may show slight eczema in the folds.
   c. There is a loss of muscle tone.
   d. The face is flat and narrow.
   e. The nose shows turbinate congestion.
   f. There is some orthodontic deformity.
   g. The palate is high-arched and narrow.
   h. There may be wheezing rales in the chest.
2. Mental examination—
   a. He is an irritable whiny child.
   b. He is very erratic in his behavior.
   c. Hyperactive periods alternate with great fatigue.
   d. He has a short attention span.

These physical and mental findings are disturbances in the developmental growth pattern associated with active allergy, which have been described by T. Wingate Todd and his associates in the study established by the Cleveland Brush Foundation[5].

As the school age approaches there is a gradual progression of the respiratory symptoms with a lessening of those referable to the gastro-intestinal tract. The neurogenic symptoms continue and there is erratic progress in both physical and mental development unless contact with the offending allergens is avoided by chance or by medical management; irrevocable changes in the respiratory and cardiac mechanisms occur. The asthma now becomes continuous and our child reaches adolescence, a permanent invalid.

Fortunately all cases of allergy are not so severe or so continuous. The allergic of the second group has his allergy masked for a great part of his early life. He is only mildly affected with gastro-intestinal symptoms and eczema in infancy and escapes the nasal symptoms until between five and eighteen years of age when seasonal hay fever begins. Since there is no activity in the preschool years there are few constitutional changes and very little is found on exammination between the attacks of hay fever. As the hay fever recurs year after year seasonal asthma begins to evidence itself at the height of hay fever season and each year thereafter there is apt to be an extension of both the nasal and bronchial symptoms into the fall and winter months. At first the winter attacks occur at infrequent intervals with periods of complete freedom between them. Gradually the frequency of winter attacks increases and the interval between them decreases until there are practically no periods complete from nasal turgescence, morning cough and wheezing. Our patient now has perennial symptoms and since these are practically as severe as those previously confined to the hay fever season

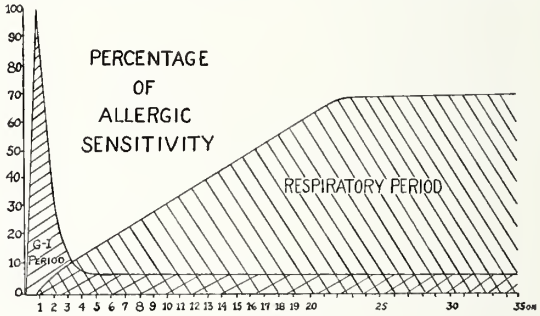


CHART NO.1

no seasonal exacerbation is noted. Sixty-five per cent of patients, presenting themselves with chronic asthma, beginning in adolescence, are of this type.

The allergic of our third group shows no evidence of allergy even in the masked form until late adolescence or young adult life. He then begins to have either nasal symptoms, bronchial symptoms or both and follows the general patterns described for the preceding group.

The fourth group has symptoms based on organic change in the nasal or bronchial passages due either to inflammation or degenerative processes. Patients in this group are not allergic in the generally accepted sense of the word; organic changes of this type, however, may produce complications in an individual with allergic manifestations, and conversely similar changes may be produced by long standing and continuous allergy. These are the patients who have actual sinus infections, chronic bronchitis and emphysema.

We have attempted to describe the life story of four typical groups of allergic patients. In practice, however, these groups are not sharply defined but merge into each other. Also, there are many variations in the type and severity of the symptoms between each group and within each group. These variations may be explained by the degree of familial tendency, the amount of contact with the exciting substances, and the nature of these substances. Since the gastro-intestinal tract of infants is readily permeable to most food substances symptoms of food sensitivity are most common in infancy. This sensitivity tends to disappear during early childhood, as the permeability of the gastro-intestinal tract

lessens and symptoms of inhalant sensitivity begin to manifest themselves later in infancy and continue to progress throughout life as contact with various inhalants becomes more frequent. Chart number one shows graphically the trend of these sensitivities and enables one to predict the relative importance of foods or inhalants in the causation of symptoms in an allergic individual presenting himself for study.

It is evident from the foregoing that the early manifestations of allergy must be recognized and treated so that the constitutional changes may be avoided and that each child may have the best opportunity to develop its potential possibilities.

This constitutes a challenge to preventive pediatrics.

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Treatment of Burns

Burns from caustic soda and lime present a special problem. Cauterization by caustic soda or lime continues until the chemical is absorbed, chemically unites with tissue elements or is removed by neutralization. First aid is extremely important in these cases. Containers of 5 per cent acetic, and saturated solutions of boric acid are kept in close proximity to the employes, and they are instructed and quickly learn the importance of its instant use. Should these solutions not be convenient plain water is used freely instead. When the burned area has been thoroughly bathed in the solution the patient is rushed to the hospital, put to bed and warm wet dressings of boric acid solution continuously applied for 24 to 48 hours. This is routine treatment, even when small areas are involved. By this method patients with mild burns are frequently able to return to work the following day, thus avoiding a lost time accident. Before we began using the wet acid dressings, what would seem an innocent burn today, by chemical action, might take on serious aspect tomorrow. It is impossible to determine the degree and extent of caustic soda burns in less than one or two days. After two to four days when neutralization is complete the parts are placed under a cradle and treated as any other burn.—T. K. McKee, M.D., Saltville, Va.; Va. Med. Monthly, Vol. 65, No. 9, Sept., 1938.

Role of the Imponderables in Surgery

Closer attention should be given by surgeons to certain imponderable but, nevertheless, important factors that may vitally concern the success or failure of a surgical operation.

This is made obvious by the undoubted fact that the psychic element may at times exert a far-reaching influence over the physical well-being of the individual.

Much can be done in the way of mental and physical relief for patients both before and after operation, thus rendering them better surgical risks.

In order to accomplish this, the surgeon must be willing to take the necessary time and trouble to study and know his patients, in order to secure their whole-hearted confidence and co-operation. In other words he must be a student of human nature. He must learn to know and respect the mental and emotional elements in his patients.

It is well recognized that much that is referred to in this paper is as yet incapable of scientific proof. It is submitted largely as a matter of interest, without any idea of drawing too definite conclusions therefrom, but with the firm conviction that there is enough in the observations reported to warrant further careful study by surgeons and physicians.

Finally the point that I have had in mind in the preparation of this paper, and the one that I would like to leave with you is: In all of our professional work let there be no whit less of the scientific but I plead for more of the human element, more heart in all of our relations with our patients. They will thus fare better, and we will have more real satisfaction in our work.—J. M. T. Finney, M.D., Baltimore; Jr. of the Fla. Med. Assn., Vol. XXV, No. 1, July, 1938.

Doctor Kearns reports what he believes to be an autoprostatectomy. Rectal examination revealed an enlarged prostate. There were toxic symptoms of diabetes and two quarts of retention. Catheterization and insulin therapy were instituted at home. There was an abscess of the epididymis with evacuation of nearly a quart of pus. Two weeks later there was acute prostatitis, high fever, chills, and intense perineal pain, but the patient continually refused hospitalization. After eight days of this, there was a spontaneous rupture of the abscess into the bladder, and voiding of large amounts of pus, followed by relief. He was observed during the next five years, with no urinary symptoms; the prostate was small and firm. He died at the end of five years from diabetic coma.—Walter M. Kearns, Milwaukee.

THE MECHANISM WHICH CONTROLS pH OF THE BODY FLUIDS

Suggestions in Practical Therapy

By ANTON W. OELGOETZ, M.D., PAUL A. OELGOETZ, B.A., and J. WITTEKIND, R.N.,
COLUMBUS, OHIO

FOR some years the writers have been engaged in a study concerning the pancreatic enzymes. Because the action of enzymes largely depends upon the pH of the medium, these studies naturally led us to a consideration of the mechanism which regulates the pH of the body fluids.

The importance of pH in physiological processes becomes plain when we recall that pepsin works best at about pH 1.5, while it is inactive in an alkaline medium; that the pancreatic enzymes find their optimal action between pH 6 to 8; that vitamin B complex is destroyed in an alkaline medium; that the water content of the tissue colloids depends upon the pH of the surrounding fluids; and, as Epright, Valley and Smith have shown, the typical aciduric flora of the gastro-intestinal tract is a reflection of the salt content, hence pH of the secretions and contents of the gastro-intestinal tract. These are but a few examples of the fundamental manner in which the entire metabolism of the animal economy is influenced by the pH of the fluids of the body.

It is known that the blood is normally buffered at pH 7.2 by the serum salts. Ionization of these salts imparts to the blood and body fluids a buffering range between pH 7 and 7.6. Thus the physiologic processes are carried on in a medium of definite and constant pH and temperature, two vital requisites in any chemical reaction.

A direct determination of all of the serum salts by chemical methods is possible but clinically impractical. The authors have previously shown[1] that the secretions of the colon, like the blood, are normally buffered at pH 7.2. Because the buffering ability of the blood and colon depends upon the concentration of salts in the serum, a determination of the buffering ability of the colon is therefore a direct measure of the concentration of serum salts. Previously, the authors described a new technique whereby the buffering ability of the colon can easily be determined. Test solutions at pH 3 and 10 respectively, when permitted to remain in the colon for 20 minutes, normally are corrected to pH 7.2, indicating the presence of the normal serum salts in normal acid-base balance. This test has since routinely been done on all cases reporting for examination and we have made the following observations.

A disturbance of the acid-base balance of the body is a relatively frequent finding. Sixty per cent of all cases were normal (balanced), 24 per cent showed a plus imbalance on the alkaline side, while 16 per cent showed a plus imbalance on the acid side. In most cases the imbalance was of minor clinical importance, as correction of the salt imbalance did not result in correction of the trouble which caused the patient to seek relief. However, in 4 per cent correction of a high degree of imbalance resulted in clinical cure of such widely different entities as trigeminal neuralgia, chronic intractable diarrhea and simple "nervousness".

The reaction of the secretion of the stomach, the salivary glands and the pancreas remains unchanged, irrespective of the acid-base equilibrium. Thus we have found a normal acid-base balance in the presence of a high degree of gastric hyperacidity and achylia. On the other hand we have found normal stomach acid values in the presence of a high degree of acid-base imbalance. In one case, which we report below, the pH of the colonic secretions was invariably 10 for more than two years, while the gastric acid values were always within normal limits. This would seem to indicate that the secretions of the salivary glands, the stomach and the pancreas are selectively secretory, a specific quality of these cells which has no relation to and is uninfluenced by the pH of the surrounding fluids. The pH of normal urine varies between 5 and 8 depending upon the concentration and kind of salts which are being eliminated by this route.

A plus imbalance on the alkaline side cannot be permanently produced by the administration of soluble alkalies even when given in large doses for long periods. When sodium bicarbonate is given in large doses, the pH of the blood and colonic secretions temporarily shifts toward the alkaline side but quickly returns to normal. The changes resulting from the administration of ammonium chloride likewise are but temporary. This would seem to indicate the presence within the body of a regulating mechanism which causes to be retained only sufficient salts to maintain an acid-base equilibrium. The fact that excess salts are rapidly eliminated in the urine suggests that

Submitted July 12, 1938.

The Authors

• Dr. Oelgoetz is a graduate of Ohio State University College of Medicine, 1917; member medical staff, White Cross Hospital. The junior authors, Mr. Oelgoetz and Miss Wittekind are associated with Dr. Oelgoetz.

the regulatory mechanism functions by controlling the reabsorption of salts by the kidney tubules.

A plus imbalance on the alkaline side cannot be **corrected** by the administration of ammonium chloride or other acid serum salts or by the ingestion of foods containing these salts. Neither can a plus imbalance on the acid side be corrected by the administration of alkaline salts. Again, the retention of salts within the body, both acid and alkaline, is controlled by a regulatory mechanism, and acid-base imbalance only results from failure of this mechanism.

Many articles have appeared in the literature of recent years concerning the danger of alkalosis resulting from the over-exhibition of soluble alkalies. Our observations indicate that such fears have no basis in fact. In the presence of the normal regulating mechanism, excess salts are not fixed, are rapidly eliminated, leaving unchanged the normal acid-base equilibrium.

These observations suggest, not a turning away from the older, more economical alkalies, but a more careful check during the period of their administration. If the control of gastric acidity **alone** is desired, as in the treatment of ulcer, alkalies should be given only in such quantities as not to surpass the acid threshold of the stomach. This can quickly be determined by frequently checking the reaction of the urine. Frequent small doses (3 to 5 grains) adequately control gastric acidity in most instances without influencing the reaction of the urine. On the other hand if an alkaline urine is desired, then alkalies should be given in doses sufficiently large to surpass the acid threshold of the stomach and appear in the urine. In the presence of the normal mechanism large doses of alkali simply temporarily swamp the organism, but do not produce permanent changes in the acid-base balance of the body fluids.

THE REGULATING MECHANISM

In August, 1935, there came to us a man who had suffered from severe, chronic diarrhea for eight years. In addition to completely liquid stools many times each day, he had lost 55 pounds in weight and complained bitterly of extreme weakness. A complete physical examination disclosed absolutely nothing to account for his trouble, with the single exception that the pH of his stool was always highly alkaline (pH 10). He had been examined and treated by many doctors without result. He was given a full, soft diet, soda and other home remedies were discontinued, serum salts were given to correct the salt imbalance, and he was intensely treated by all of the usual methods for more than four months—without result.

The weakness continued to grow worse until he was forced to abandon his work as a barber. In a purely symptomatic effort to raise his blood pressure (100 systolic) and thus perhaps alleviate the distressing weakness, he was given suprarenal gland substance, two 2-grain tablets four times daily. A few weeks later he began markedly to improve, daily growing stronger and there was a steady gain in weight until he has registered an increase of 60 pounds in four months. The diarrhea likewise improved but much more slowly than his other symptoms. Six months later he had entirely lost his weakness and returned to his work. At this time the pH of the colonic secretions was pH 8. The first stool passed in the morning was still completely liquid, while that passed later in the day was of a semi-solid consistency, not entirely normal but sufficiently so as not to cause distress.

Because the suprarenal substance had been given purely on a symptomatic basis it was now discontinued while we tried other, newer remedies, whereupon the whole train of symptoms recurred. In reviewing the case at this time we were struck by the fact that **something** in his previous treatment had done him a lot of good. Accordingly he was again given suprarenal substance which slowly but steadily reversed the picture. Four months later he had made a complete recovery; he weighed more than ever before, his stool was normal in consistency, the pH of the stool was 7.2 and the colon normally corrected test solutions to pH 7.2.

This man had been given serum salts in the same relative concentration as found in blood for many weeks without result. With the exhibition of suprarenal substance the pH of the stool rapidly changed toward the neutral point, although the serum salts had been discontinued. This indicated to us that suprarenal substance contains the principle which, by fixing specific salts in a physiologic concentration and balance, controls pH of the body fluids. Salt imbalance cannot be corrected by the administration of the serum salts. In the presence of an adequate quantity of suprarenal substance the exhibition of serum salts is unnecessary, as the organism derives and fixes sufficient salts from the daily intake of food to maintain the normal acid-base equilibrium.

Hartman[2] has shown that the intravenous administration of adrenal cortex hormone to normal dogs produced a 40 to 80 per cent retention of sodium; 10 to 50 per cent increase in chloride retention, 5 to 22 per cent increase in potassium retention, and increased ammonia retention ranging from 23 to 110 per cent. In later cases the present authors worked with adrenalin (per rectum and by injection) and with cortin (by mouth and by injection) in an effort to find which fraction of the gland contains the regulating principle. Adrenalin per rectum seems to be entirely inert; when injected its action is too rapid and too fleeting; at any rate, results were entirely negative. According to Hartman cortin is the salt fixing principle of the gland. However, it was disappointing in our hands. It is our distinct impression that the whole gland by mouth

gives the most economical and clinically the best results.

CONCLUSIONS

1. Acid-base imbalance can quickly be determined by a test which has been described elsewhere;

2. Evidence has been noted which indicates that the suprarenal gland contains a principle which, by fixing ingested salts, regulates the pH of the body fluids;

3. Acid-base imbalance of the blood and body fluids can be corrected by the administration by mouth of whole suprarenal gland substance.

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1025 WHITTIER STREET.

Colloidal Aluminum Hydroxide Therapy

In colloidal aluminum hydroxide we have an antacid which serves as a buffer of hydrochloric acid and so reduces the irritating action of the gastric secretion on the injured mucosa of the stomach and duodenum. It may also inhibit digestion of a blood clot over a hemorrhaging ulcer. The substance is fairly palatable and does not ordinarily produce nausea. Its use even over as long a period as one year seems to produce no harmful action on blood cystology or chemistry.

Colloidal aluminum hydroxide proved to be an antacid of considerable value in the treatment of twenty peptic ulcers; one gastric and nineteen duodenal.

Comparison of results of colloidal aluminum hydroxide therapy with alkali therapy seems to give an advantage to aluminum hydroxide.

The only serious drawback noted was the fact that colloidal aluminum hydroxide has no laxative action and in patients on a liquid diet or in patients at rest in bed some other substance (such as cascara sagrada) must be used to promote proper evacuation of the bowel.—Richard Campbell Connelly, M.D., F.A.C.P., Detroit, Michigan; Jour. Mich State Med. Soc., Vol. 37, No. 8, August, 1938.

A girl, aged fourteen, had a ureter inserted in the fibers of the vesical sphincter, causing pyoureter and pyonephrosis, which had formerly been diagnosed as pyelonephritis. Voided specimens contained pus, whereas catheter samples were always without pus. Explanation: Pus got out of the aberrant ureter only while the vesical sphincter was relaxed during urination.—Charles R. B. Crompton, Toronto.

Preventive Aspect of Antenatal Care

Antenatal care is not merely the examination of the patient with regard to the size of her pelvis and the position of the fetus. It is the general medical examination which is of the utmost importance. Far too much stress has been laid upon pelvis measurements and too little upon the general build and nutrition of the patient. A contracted pelvis in itself is not a cause of maternal mortality, and a malpresentation of the fetus does not always mean a stillbirth if proper safety precautions are taken. We have clear and direct rules to guide us in such cases.

Toxemia is the largest contributory factor in maintaining a high maternal mortality. It means lowered resistance to infection and is a predisposing cause of obstetrical shock as the result of labor. It is the cause of most cases of antepartum hemorrhage apart from that due to placenta praevia and it predisposes to the muscular fatigue of the uterus which results in postpartum hemorrhage. It is the attention to the small things in the examination of the expectant mother which prevents the onset of the more serious forms of toxemia. Carious teeth with pyorrhea should be attended to at once and never left, as so many patients desire, until the pregnancy is completed. We have proved time and again the importance of the early recognition of symptoms which, if overlooked, lead to inevitable disaster. Puerperal sepsis nowadays is rarely the result of carelessness in our antiseptic or aseptic technique during labor and delivery. It is due in most cases to something inherent in the patient herself which renders her less resistant to septic organisms.

Hepatic insufficiency is the root cause of the more severe forms of toxemia, abortions and stillbirths. The fate of the patient depends to a great extent upon her condition of health during pregnancy rather than upon the complications which may arise during labor provided she has placed herself under skilled supervision. We see this when we take every possible precaution for safety in an emergency labor case which ends disastrously from hemorrhage, shock or sepsis. Deaths from postpartum hemorrhage are not always the result of a great loss of blood, but are due to the patient's inability to survive even a moderate loss owing to her condition of anemia and low resistance. To the average student and young specialist the chief attraction of midwifery practice is its excitements, such as Caesarean section, forceps deliveries and other surgical methods. The waiting game while Nature takes charge is devoid of interest except to those who have had experience of the benefits of conservative midwifery practice.—Dame Louise McIlroy, M.D., London, England; Medical Record, Vol. 148, No. 6, Sept. 21 1938.

PROCEEDINGS OF OHIO STATE SOCIETY OF PATHOLOGISTS

R. S. FIDLER, M.D., *President*

At a meeting held at the time of the annual convention of the Ohio State Medical Association in Columbus, May 3, 4, and 5, 1921, a group of clinical pathologists were called together in the old State Street Building of the College of Medicine of the Ohio State University by Drs. Scott, Spohr and Forman, of the Department of Pathology.

At this meeting the Ohio Society of Clinical and Laboratory Diagnosis was formed under the presidency of Professor Ernest Scott. Its purpose was to promote clinical laboratory work and to stimulate its wider application.

This Society has continued to function successfully along these lines. Its proceedings will appear regularly in these pages presented in a manner that all physicians may learn what is going on in this field of practice.—Editor.

CLINICAL PATHOLOGICAL CONFERENCE

THE regular Saturday Morning "C.P.C." of Starling-Loving University Hospital arranged by H. L. Reinhart presented the opening discussions by R. A. Keating, surgical intern, and K. T. Langacher, surgical resident. B. K. Wiseman of the attending staff summarized the clinical aspects of the case and E. von Haam discussed the pathology. Copies of the clinical record, autopsy protocol and a list of references for additional study were presented to each individual. Pathological specimens from the autopsy and enlarged photomicrographs illustrating the characteristic pathology were demonstrated. The value of conferences to the resident staff which assumes an active part, and the perspective of attending staff members of various departments was practically demonstrated.

The case under discussion was one presenting the clinical aspects of an acute cholecystitis, and the anatomical pathology of acute hemorrhagic pancreatitis.

Meningococcus Endocarditis and Myocarditis: Report of a Case. R. M. Hartwell.

A case is presented of a 13 year old boy who entered the hospital with symptoms suggesting acute osteomyelitis of the knee and ankle. Symptoms of the central nervous system led to cultures of spinal fluid and blood, which showed meningococci. The boy died on the seventh hospital day and autopsy revealed acute meningococcic valvulitis, acute purulent myocarditis, septic infarcts of the spleen and kidneys, acute purulent meningitis, acute serous polyarthritis, and septicemia with cutaneous petechiae. Microscopic examination of the myocardium revealed small abscesses and infiltrations of mononuclear cells which were arranged somewhat like Aschoff nodules. The mitral valve was ulcerated and perforated and meningococci were recovered from the ulcerated area at autopsy. The lungs presented an acute interstitial pneumonia, the infiltration being of the same character as that observed in the myocardium. There were focal areas of cellular infiltration in the liver but no abscess formation. The kidneys presented acute abscesses and an acute embolic glomerulonephritis. Sections of the brain revealed a typical acute purulent meningitis and numerous small abscesses located in the brain tissue.

Although septicemia is common, cardiac involvement due to meningococcus is relatively rare, about 30 cases having been reported in the literature.

Multiple Recurrent Tumors of the Arm. A Case Report. F. C. Andrus.

This case illustrates the classical features, both clinical and anatomical, which occasionally develop in multiple lipomata of the extremities. The clinical features are characterized by the appearance of one or more small fatty tumors beneath the skin of one of the extremities, which are excised with or without surgical recognition of the extension or the presence of other fatty tumors between and beneath the muscles and fascia. Occasionally it is possible to excise these deeper tumors; often it is impossible. Local recurrences follow, attended by increasingly extensive operations until eventually amputation may be necessary. Study of the tumors reveals the gradual evolution from an initial benign adult cell type of fatty tumor (lipoma), through xanthomatous and myxolipomatous to myxosarcomatous or liposarcomatous, clinical features and histo-pathology. When sarcomatous characteristics are present death from widespread metastasis is not uncommon.

Studies on 500 Consecutive Clinical Endometrial Biopsies. R. S. Fidler.

From the study of a series of 500 consecutive endometrial biopsies in cases of manifest disturbance of the glands of internal secretion the following observations are presented; 1) Endometrial biopsies represent only one phase of the study of disfunction of the female sex glands. Biopsies are of greatest value, when correlated with a careful clinical history and physical examination, basal metabolism and glucose tolerance test, and especially when an exact knowledge of the day of the menstrual cycle upon which the biopsy is obtained is available. It is

Fall Quarter Meeting, Columbus, Ohio, October 15, 1938. Guests of the Department of Pathology of Ohio State University.

then possible to compare the actual state of the endometrium with the expected normal evolution at any given time in the cycle. Furthermore, the value of the evidence is increased if several specimens are obtained during a single cycle, or repeated specimens at the same stage during the succeeding cycle. 2) Endometrial biopsies, often obtained under office conditions, are not a substitute for curettage especially where cancer is suspected, as a small cancer area may be readily missed without thorough curettage.

Development of a Slide Exchange of Representative Pathological Specimens. H. B. Davidson.

The establishment of a representative slide collection of unusual cases for each individual has long been a cherished ambition of members of the Society. Such a maneuver has now become a possibility and with your cooperation will soon become a reality. The Department of Pathology of the Ohio State University College of Medicine, Dr. Emmerich von Haam, chairman, has agreed to produce tissue sections and furnish accompanying case histories for each member in good standing of this Society. I propose that the President appoint a registrar to receive tissues and case histories from the membership, select the most valuable cases, and oversee the preparation and dissemination of slides and histories. Slides will be limited to a total of fifty cases during the first year and will be sent out shortly before each of the regular meetings. The members may study the slides and submit their diagnoses. Cases which warrant comment and discussion will be placed on the program at the following meeting. This plan will be a distinct service to the patients, physicians, and pathologists of Ohio, in that it will offer the opportunity for the progressive collection of slides of representative specimens along with adequate clinical data, particularly of the less common types of disease. By studying and discussing these we will participate in a definite and progressive program of postgraduate study. It is upon such a basis that this work is being assumed by the University. Dr. Fred Stewart and Dr. George Pack of Memorial Hospital in New York City have graciously consented to act as consultants in controversial cases.

The Laboratory Diagnosis of Venereal Lesions. E. von Haam.

Six hundred and twenty-two patients with lesions of the pudendal regions were studied by the author in the Laboratory for Venereal Diseases of New Orleans with the purpose of determining the exact etiology in each case. Examination of the lesions together with a series of carefully planned and executed laboratory tests permitted the following conclusions:

1. Seventy-six and five-tenths per cent of all pudendal lesions were caused by infections commonly termed as venereal diseases. Chancroidal infection and lymphogranuloma inguinale were the most common etiologic factors recognized in our diagnostic laboratory.
2. One out of every four or five pudendal lesions was definitely caused by some other known or unknown etiologic agent. Pyogenic infections of the traumatized skin or mucous membrane of the genitalia must be regarded as the most frequent cause of the non-specific venereal lesions.
3. In ten and five-tenths per cent of the observed lesions no diagnosis as to the etiology of the lesions could be made, although the known venereal diseases could be excluded as the causal factor.

Preservation of Interesting Pathologic Specimens. D. E. Cooper.

Although relatively few pathologists are concerned with the actual development of a Pathological Museum, every-one occasionally encounters a specimen which he would like to retain for some period of time, in as nearly its fresh appearance as possible. Such a procedure is neither difficult nor expensive, but does require planning and preparation in advance. In our experience the original Kaiserling method gives by far the best results in preserving the natural color of specimens. They must be obtained fresh from the autopsy or operation and not allowed to soak in water for more than a few moments. A single specimen should be fixed in a jar sufficiently large that the specimen may be suspended, and not allowed to come in contact with the bottom or sides of the jar. The value of any specimen is in direct proportion to the descriptive data, knowledge of etiological factors if possible, clinical history, physical examination and course of the disease which it represents.

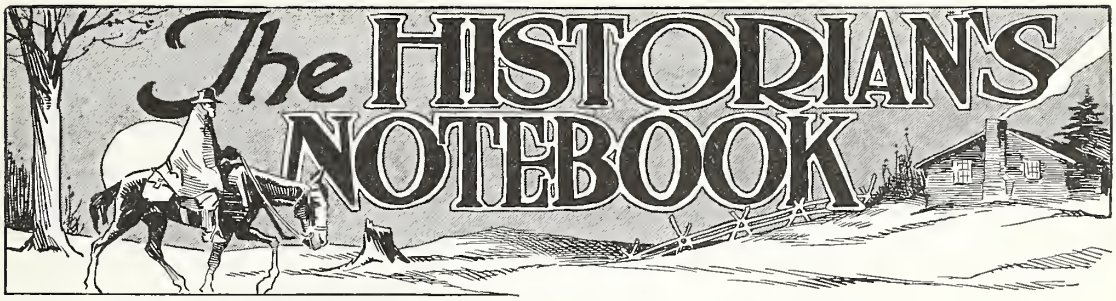
ROUND TABLE TISSUE SEMINAR

Members of the Society presented case histories, pathological specimens and slides of tissues from interesting and unusual cases for differential diagnosis and general discussion. Excellent micro-projection facilitated group study, discussion and pertinent comments.

BUSINESS MEETING

The business meeting was held previous to the dinner at the Faculty Club of Ohio State University. The next quarterly meeting of the Society will be in Columbus, Ohio, the latter part of January. Announcement of the exact date and program will be made through the next issue of the *Ohio State Medical Journal*. At this meeting the slide exchange service of the Society will be instituted.

For a year and a half, a patient had pain in the right kidney region, accompanied by chills, fevers, and pus in the urine. He had been operated at the beginning of the symptoms for appendicitis. Two days later the symptoms returned, and a diagnosis of renal stone was made; the stone was thought to have passed, but the symptoms persisted. A diagnosis of pyelitis was made by another physician, and then the patient came into the hands of the contributor of this unusual case. Briefly, an examination revealed a kidney almost functionless on the affected side, with a marked hydronephrosis. At the nephrectomy, unusual difficulty was encountered in severing the ureter, and much to the amazement of the surgeon, a Garceau catheter was found to have been lost by someone, and the cause of the patient's illness was discovered.—Nathan G. Hale, Sacramento.



Kept by David A. Tucker, Jr., M.D., Cincinnati, Ohio

THREE PHYSICIANS OF THE PURPLE

By DONALD D. SHIRA, M.D., Columbus

AMONG the early physicians of Ohio there are three who deserve an indisputable right to the historian's notice. Whatever the official shibboleth of our time-honored profession, it was surely exemplified in the lives of these members of the medical nobility: Dr. Jabez True, Marietta; Dr. Thomas Flanner, Zanesville; and Dr. Samuel Prescott Hildreth, Marietta.

The Author

● Dr. Shira is a graduate of Ohio State University College of Medicine, 1914; former health commisisoner of Akron and Summit County; assistant secretary Ohio Public Health Association.

DR. JABEZ TRUE, OHIO'S FIRST PHYSICIAN

The name, Jabez True, seems singularly appropriate for the very first civilian physician who practiced medicine in Ohio and the Northwest Territory. Although unprepared to say one way or the other, Jabez at least sounds like a good old biblical name, smacking of righteousness and dependability; and True, suggestive of one of the greatest virtues a physician can possess—moral integrity.

Dr. Jabez True, son of Rev. Henry True, was born in Hampstead, N. H. in 1760. In that day, before the founding of many high schools or academies, it was the custom for New England clergymen to prepare young men for college. Before the Revolution the Rev. Mr. True had such a class and son Jabez was one of his students, who, after acquiring a competent share of the classics began to read medicine under one Dr. Flagg of Hampstead. After completing his studies as apprentice he enlisted as a surgeon on a privateer ship and sailed for Europe. Unfortunately the ship was wrecked off the coast of Holland and Dr. True remained among the Hollanders for two years. Upon his return to America he located in Gilmanton, N. H., where he practiced for two years.

The newly organized Ohio Company had bought up a large tract of land in southeastern Ohio, and Dr. True "feeling a strong desire to visit the enchanting region along the shores of the Ohio, so admirably described by the writers and travelers of that day, purchased a share of their lands, and concluded to leave the home of his forefathers, and come out to Marietta in company with a family from Newburyport. The emigrants arrived at the mouth of the Muskingum early in the summer of 1788. The settlement at that time had but a few persons in it. The country was covered with a thick forest, and there was more employment for able-bodied men in clearing lands and building log-cabins than for physicians." It is recalled that Marietta was founded April 7, 1788; thus did Dr. True become the first practicing physician in Ohio.

The Indian War was raging at that time and Dr. True was appointed a surgeon's mate at $22 per month, which no doubt proved a godsend to the young doctor struggling for a foothold in the wilderness. After his brief war experience he resumed his practice in Marietta.

Since, at that time most of the settlements were along or near the shores of the Ohio, he made most of his visits up and down the river by canoe, generally accompanied by two armed guards, as a protection against Indian attack. It was not unusual for him to go as far as 30 miles from Marietta to give surgical aid to those wounded by the Indians and to care for those suffering from scarlet fever and smallpox, both of which diseases were very virulent and often reached epidemic proportions.

Dr. True was celebrated for his sympathy. He usually consulted with his patients and if for any reason the medicine he contemplated giving

did not agree with them, changed to something else, unless in his opinion no substitute could be found. Again Dr. Hildreth observes: "His attitude at the bedside of the sick was peculiar and striking. Leaning a little forward in the chair, with his long slender legs crossed over each other, his compassionate but single eye intently fixed on the patient (having lost the use of the other from a long and painful disease of the optic nerve), with one hand on the pulse and the other diligently switching about a long cue, for he kept up the good old fashion of keeping the hair carefully dressed with a black ribbon. It was a habit he had insensibly fallen into when his mind was engaged on any subject of deep thought and no doubt aided in fixing his attention. The result of his calm, deliberate judgment was generally very correct, and his treatment of disease remarkably successful, which was, doubtless, in part, owing to its simplicity. It is a lamentable fact that many die from the effects of too many and improper remedies, as well as from disease itself".

When not professionally engaged Dr. True, emulating Cincinnatus, spent his time clearing and cultivating a small farm about a mile from Marietta. He had never married, having boarded for several years at the Moultons with whom he emigrated to Ohio. Later he boarded with the widow of Capt. William Mills, whom he married in 1806. Dr. True was a member and deacon of the Congregational Church in Marietta, the oldest religious organization in Ohio. "His charity for the poor and especially the sick poor was unbounded", remarks Dr. Hildreth, "and only limited by his scanty means, often bestowing upon them in addition to his own services, the larger portion of the avails of his attendance upon richer patients. The people were many of them poor and just beginning life in a new country—had but little to spare for the services of a physician. With him, however it made no difference whether the patient was poor or rich; he was always ready when his health permitted, to attend to the calls, and to divide his last dollar with those who were in want. As the country became more thickly settled, the roads better, and the people more wealthy, other physicians came in and divided with him the medical business, which he bore without murmuring or complaining, willing to see all prosperous and happy, even at his expense. For several of the last years of his life he held the office of county treasurer, which afforded him a small remuneration without much toil and enabled him to extend his charities—".

In conclusion Dr. Hildreth states: "He was a man of whom no enemy could say hard things, and whom every one loved and respected. He died after a short illness of the prevailing epidemic fever of 1823. The memory of this good man is still cherished by the descendents of the pioneers, for his unusual charity, simplicity of manner, and sincere unaffected piety."

While this may seem rather an extravagant panegyric it must be remembered that Dr. Hildreth, a contemporary of Dr. True, mingled with him socially and counseled with him professionally. Knowing Dr. Hildreth's reputation for honesty and accuracy, there is no reason for doubting his veracity in this case.*

DR. THOMAS FLANNER, MARTYR

The annals of medicine are replete with the names of physicians who have held high the proud escutcheon of the medical guild. Many of the more illustrious achieved immortality; but other countless thousands silently vanished into the shadow-land of unsung martyrs—victims of unwavering devotion to the ideals of their profession. Such a one was Dr. Thomas Flanner who practiced medicine in Zanesville, Ohio, from about 1821 to 1833. It is with considerable satisfaction, not unmixed with reverence, that "these imperfect notices" concerning his life are herein presented. Although they are necessarily sketchy, because of difficulty in securing all the desired facts, they may serve to revive and to keep alive, the memory of one who gambled, and lost, his life in the cause of humanity more than a century ago.

Dr. Thomas Flanner was born in North Carolina,[1] probably about 1795. He was a son of William and Penina Flanner. His father was a minister in the Society of Friends. Dr. Flanner had a brother (name unknown) who also was a physician, and one maiden sister, Abbie, who was a school teacher and a poetess of more than local reputation. She lived near Mt. Pleasant, Ohio, in a cottage which she christened "Albi Cottage", and which was built largely with funds supplied by her doctor brothers.[2]

Unfortunately, diligent search has failed to uncover any facts concerning Dr. Flanner's early life. He matriculated in the Medical School of the University of Pennsylvania in 1818 and was graduated in 1820. He returned to his alma mater in 1820-1821 for a postgraduate course. A meagre entry in the alumni records of the University of Pennsylvania states that he died near Barnesville, Ohio.[3]

Following graduation Dr. Flanner located in St. Clairsville, Ohio. Remaining there but a short time he moved on to Zanesville, where he soon established an enviable reputation. On Jan. 28, 1823, he was united in marriage with Miss Heziah Dillon, of Zanesville.[4]

Evidently Dr. Flanner took an active interest in both civic and medical affairs, because in the brief twelve years of his professional life he was

* All substance matter and quotations are from, Biographical and Historical Memoirs of the Early Pioneer Settlers in Ohio. S. P. Hildreth, M.D., p. 329.

appointed a censor of the 15th Medical District in 1824,[5] was elected president of Zanesville Atheneum, 1832,[6] and president of the Ohio Medical Convention, 1832.[7]

In 1833 an epidemic of cholera was raging in Wheeling, W. Va. "In the month of May, he (Dr. Flanner) determined to visit the place, and study its character before it might reach the people who might look to him for advice".[1] The tragic outcome of his visit to the cholera infested region as well as an intimate insight into the personality of the man, is best described in the following newspaper account:

"It is with sincere regret that we announce the death of Dr. Thomas Flanner—one of our most eminent physicians—one of our most useful citizens. The circumstances attending his decease are such as will naturally tend to increase the general respect which was felt for him by the whole community, and which was strikingly evinced by the manner in which the melancholy intelligence of his loss was received on Saturday last. Dr. Flanner left here on the Monday preceding for the purpose of visiting Wheeling and informing himself of the character of that pestilence which has been committing such dreadful ravages. He experienced symptoms of the disease before he reached Wheeling, but still persevered, and after visiting a number of cases there on Thursday morning, proceded to Mt. Pleasant, from whence, feeling better, he walked some distance to the home of his sister, and from the operation of medicine, flattered himself that he was free from danger. He then retired to rest, but about midnight experienced a recurrence of the attack in a violent form, and in a few hours was a corpse.

"It is due to the public safety to state, that there is nothing peculiarly alarming in the decease of Dr. Flanner. The natural irritability of his nervous system rendered him more than ordinarily liable to a disease like the cholera, of which he was himself so well aware that he more than once expressed his decided belief, that if ever he was attacked with the disease, he should not recover.

"This belief alone, even without the foundation which gave rise to it, would be sufficient in an ordinary case to account for the death of the person possessing it—but when in addition to this, we consider the belief was founded on physical facts, in which other physicians concurred, we can only, as we are constitutionally disposed, either blame or admire, that disregard of personal safety which led the deceased to the performance of what he considered a duty, involving the hazard of his life, for the benefit of the community which relied upon him, in part, for their safety and from the devastating scourge which caused his death".[8]

Dr. Flanner died June 6, 1833.

RESOLUTION OF PHYSICIANS

"At a meeting of physicians from Zanesville and Putnam held on Saturday evening last Dr. Robert Mitchell was called to the chair and W. Moorhead appointed secretary. The following preamble and resolutions were adopted:—

"The physicians of Zanesville and Putnam having just received the painful intelligence of the sudden and unexpected death of their late brother practitioner, Thomas Flanner, M.D., who has fallen in the prime of life, and the meridian of usefulness, a victim to that professional zeal which so eminently distinguished him—

"Resolved—That they participate with the public at large in unaffected sorrow for the loss which has been sustained.

"Resolved—That a copy of these resolutions be presented to Mrs. Flanner, and family of the deceased, and another be furnished for publication to each of the editors in this place.

Rob't. Mitchell, Chairman,
W. Moorehead, Secretary."[8]

EPILOGUE

Does the following newspaper notice indicate that tragedy still followed in the wake of Dr. Flanner's untimely death? Perhaps it is the old, old story of the improvidence of most physicians. Perhaps Mrs. Flanner in order to provide sustenance for herself and the five orphaned children was compelled to resort to the following:

PUBLIC SALE

"I will offer at Public Sale at the Zanesville Atheneum on Wednesday, the 11th day of September next, at 9 o'clock A. M. of said day, the personal property of the late Dr. Ths. Flanner, dec. consisting of his Medical Library, Surgical Instruments, & C. Chairs, Tables, Piano Forte, one Secretary and Book Case, 2 Bureaus, and other household and kitchen furniture. Also one Horse and Gig.

The terms will be made known on the day of Sale.

Jno. Willson, Jr., Adm'r."[9]

1. The Western Journal of the Medical and Physical Sciences, 1833. Vol. VII. p. 157.
2. Hist. of Belmont and Jefferson Counties, O. Caldwell. 1880. p. 539.
3. Cor. William Pepper, M.D., Dean, School of Med., Univ. of Penn. 1938.
4, 6, 8, 9. Zanesville (Ohio) Republican, 1823, Feb. 1; 1832, June 15; 1833, June 15 and Aug. 24.
5. Hist. Muskingum Co., O. Everhart Co. 1882. p. 142.
7. House Journal (Ohio), 1833. p. 229.

DR. SAMUEL PRESCOTT HILDRETH
SCHOLAR, AUTHOR, LEGISLATOR

The name Dr. Samuel Prescott Hildreth is so familiar to physicians that it may seem superfluous again to sketch a vignette of his life. However there may still be some phases of his long and useful career which are not generally known.

The people of our state owe a great debt of gratitude to him for his faithful delineation of pioneer life, and for his printed discourses concerning climatology, mineralogy, botany and geology, on the latter of which he was considered an authority. He was also the father of the first Ohio law designed to regulate the practice of medicine.

Dr. Hildreth, son of Dr. Samuel Hildreth, was born in Methuen, Essex county, Mass., on Sept. 30, 1783. His boyhood days were spent on a farm in an environment conducive to physical development and to stimulating interest in natural phenomena. His early education was acquired in the public schools, at Phillips Academy at Andover, and at Franklin Academy. At a very early age he evinced a taste for books and in later years was an insatiable reader. He began the study of medicine under a Dr. Kittridge of



SAMUEL PRESCOTT HILDRETH, M.D.

Andover and sometime later attended lectures at Cambridge University (Harvard). In 1805 he was granted a certificate to practice medicine by the Massachusetts Medical Society.

Dr. Hildreth first entered practice in Hampstead, N. H., the native home of Dr. Jabez True, and boarded at the home of one John True. He was greatly impressed by the account of Dr. True's professional success in Marietta, and entranced by the stories he heard of the opportunities for a young doctor in the Ohio country. As a result in 1806 he started west on horseback, being en route about one month. In his autobiography he says: "It was a land of strangers; but he was young and his heart buoyant with hope and expectation of good fortune".

At the time of his arrival, Marietta had two physicians—Dr. True and Dr. Hart. There being none at Belpre, at the solicitation of leading citizens, Dr. Hildreth decided to locate there, and arrived on Dec. 10, just in time to see the "deluded Blennerhassett leave his island paradise to embark in Aaron Burr's perilous expedition".

The following year (1807) an epidemic of fever raged along the Ohio river. Dr. Hildreth labored arduously, traveling at times as far as thirty miles through the wilderness to call on patients. His treatment is said to have been singularly successful. The work however proved too strenuous and he developed an inflammation of the hip which persisted for many months. In 1808 he returned to Marietta. At this period he began writing and soon "became known as an acute, discerning investigator and faithful writer on scientific and historical subjects."

In 1810 he was elected to the Ohio House of Representatives and was reelected in 1811. It was during his tenure of office that he conceived, drafted and was instrumental in having adopted the **first law in Ohio regulating the practice of physic and surgery.** Quackery had been running rampant and some sort of reform had become imperative. The public must be protected against itself.

THE FIRST MEDICAL LICENSURE LAW (1811)

The law directed that the state be divided into five medical districts. Three physicians were named in each district as censors, whose duty it was to meet twice a year to examine the applicants and to issue licenses to practice. It stipulated that the candidate should be of good moral character and that he shall have had at least three years training under a competent physician. It also provided that licenses should either be printed on "smooth handsome paper or written on parchment in a fair, round hand." A singular feature of this law was that, while it did **not** prohibit a person without a license from practicing medicine, it **did** stipulate that no person so practicing could evoke the law to collect fees for services rendered.

The law did not prove as effective in curbing charlatanry as its protagonist had hoped but nevertheless it was a step in the right direction and formed the cornerstone for the structure of a later medical licensure system.

Dr. Hildreth carried his investigations into nearly every branch of science, but to him natural history had the greatest appeal. As previously stated he published many papers on medicine, botany, zoology, mineralogy, meteorology and history. He was a talented artist and many of his printed articles were illustrated with original drawings and wood cuts. His writings have been the "means of preserving a variety of important historical facts and interesting anecdotes which would otherwise have been lost to posterity".

During his life he made a natural history collection of more than four thousand specimens, which cabinet he donated to Marietta College.

Prof. Benjamin Silliman, with whom Dr. Hild-

reth was intimately associated, in his Journal pays this touching tribute to him: "In his private life he illustrated every virtue of a Christian gentleman. Bright and cheerful by nature, he loved nature with the simple enthusiasm of a child. Industrious and systematic to a high degree, no moment of life was wasted. In his family we have seen a beautiful example of domestic happiness and warm-hearted hospitality. He lived with nature and nature's God—and among the patrons and co-workers in this journal, who have left its founder almost alone, no one has shed a purer and more mellow light in the horizon of his setting sun—no one has departed more loved and regretted by the senior editor."

Dr. Hildreth participated actively in all affairs pertaining to medical organization and was elected president in 1838 of the Ohio Medical Convention.

Dr. Hildreth died July 24, 1863 in his eightieth year.

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Muhlenberg Township, Pickaway County

For a number of years after the first settlement was made there was no physician nearer than Chillicothe. When the services of a physician were required as was frequently the case in the new country, a message was despatched to Dr. Scott, of that place, until so late as 1810. In that year Drs. Turney, Webb, and Luckey, settled in Circleville, and being good physicians, and more convenient of access, they were employed. In 1826 Dr. Rafe, a Frenchman, settled at Darbyville, where he remained some years, until his death. He was a weak little man of no great force, and very slack in collecting his bills, and just as slack in paying his debts. It was frequently the case that a creditor, to secure his debt, would attach the doctor's faithful horse, "Botherum". When this happened he would call on Colonel Florence, and with a lugubrious countenance, say "I'm ruined". His creditors had taken "Botherum" again. Colonel Florence helped him out of this trouble many times.

Dr. Noble and Dr. Wilson came later, and for some years dealt out calomel, jalap, aloes, and the nauseating drugs so extensively used in those days, as the needs of their patients required.

Dr. James Allen settled in Darbyville about 1833. He was born in Pennsylvania about 1803, and came down the Ohio river with his father in 1812, settling in Fayette county, where his father bought a small farm. About 1824, Dr. Allen read medicine with Dr. Toland, of London, Madison county. He was examined by the president and members of the eighth medical district of Ohio, in 1827, and granted a diploma, after which he practiced for a time in Frankfort, Ross county. In 1833 he moved to Darbyville, where he continued his practice for twenty-two years. He accumulated considerable property by careful, straightforward, economical habits, and bought nine hundred acres of land in Muhlenberg and Darby townships. He moved to his farm in 1853, and remained there a year, when he again moved to London, Madison county, where he died, July 8, 1867.

Dr. Richard H. Tipton began the study of medicine with Dr. Sisson, of Columbus, in 1841, and attended lectures in Cincinnati one year, when he went to Philadelphia, where he graduated in 1850. He began the practice of medicine in Darbyville, in 1846, before graduating, and after receiving his diploma returned. He has since remained in Darbyville, except during the war, when he entered the service as surgeon of the Ninetieth Ohio infantry, serving in all the campaigns in which the regiment participated. —Williams Bros., Publishers, 1880: History of Franklin and Pickaway Counties, Ohio—pp. 339.

TAKING A BIRD'S-EYE VIEW OF MEDICINE IN SOUTH AMERICA

PART II

By T. E. NEWELL, M.D., DAYTON, OHIO

A discussion of "black cardiacs" was most striking, emphasizing bone marrow failure, and relieved by systematic breathing exercises. We were told that there is actually no inability to utilize oxygen. A case of obesity was shown in contrast to demonstrate the fact that the etiology was the same in both cases, namely improper and shallow breathing with development of a rigid, fibrotic lung with bronchitis and emphysema. These black cardiacs develop polycythemia, are worse in winter and the treatment is respiratory gymnastics. X-rays were displayed showing stages of development of the (1) summer tree, (2) spring tree, and (3) winter tree types.

Dr. Castex demonstrated the making of relief pictures by superimposing positive films on negative films and photographing them; giving the appearance of a relief map to accentuate certain qualities in the picture of diagnostic value.

Dr. Pollitzer presented his "diagraphia" which is an ingenious device that holds grid films superimposed on one another and oscillates them up and down rhythmically as in respiration. One grid film is taken on inspiration, one on complete expiration, and several between. This very cleverly showed movements of intrathoracic organs giving a clear idea of what happens to tuberculous cavities in different parts of the lung during respiration. Some cavities were shown to be quiet, although pneumothorax was not adequate to completely collapse them.

Subcutaneous injection of oxygen and carbondioxide, daily injections on 20 consecutive days, was shown to be of benefit in cases of intermittent claudication. One case was presented, who could walk but one or two blocks before treatment, and is now able to walk 40 blocks without claudication.

The use of large doses of sodium salicylate in acute rheumatic fever was discussed: 23.5 grams per liter is given per rectum, 40 drops per minute by Murphy drip. Enormous doses are also recommended to be given into the duodenum by a duodenal tube. Untoward reactions are said to be few following this method. The conclusion is that this drug is of distinct value in the treatment of this disease but our usual dosage is insufficient to perform the real benefit we may obtain if we use proper large dosage.

A lecture on parasitology was given by Dr. Daniel Greenway. Fifty per cent of digestive disturbances in Buenos Aires are due to Taenia saginata, beef tapeworm which travels from cow to man. Raw meat is the medium. Hook worm and trichinosis are common.

The Author

Dr. Newell is a graduate of Ohio State University College of Medicine, 1927; member American Heart Association; tuberculosis service, and assistant medical service at St. Elizabeth Hospital, Dayton, Ohio.

We were shown the value of the extensive use of paper X-ray films in diagnosis of tuberculosis in the general population. They use a mobile apparatus which can be taken from place to place, quite similar to the method used by Dr. Sampson at Trudeau Sanatorium only on a larger scale. A large number of X-rays may be taken in a short time; 80,000 X-rays were taken in one year, of which 13,000 proved to be tuberculous.

We visited the large municipal hospital, Hospital Muniz, which has separate buildings for measles, scarlet fever, diphtheria, trachoma, tuberculosis, and leprosy. The leprosy hospital is one of the oldest of the group.

The doctors took us through the leper colony, showed us the pavilions for ambulatory cases, the wards, dining rooms, and living quarters. They showed us the new pathological laboratory where intensive research work on leprosy is under way. The technician showed us specimens and stained smears. We saw bacilli in clumps and single rods, resembling tubercle bacilli.

On the wards we were shown the diagnostic points in leprosy—anesthesia to pin prick, falling of the eyebrows, alopecia, masked face, bulbous nose and face, pocked skin, etc. We saw early, middle, and advanced cases. I was asked to feel the texture of the skin of a patient in which the face was affected. This I declined to do and was informed that this was not dangerous, that attendants have worked there for 15 years and have never been known to contract the disease by so doing. Nevertheless I maintained my position, and was content with inspection and to omit palpation entirely.

The tuberculosis hospital was very modern and ward rounds reminded one of some of our best tuberculosis hospitals in our own country, large airy rooms, large windows providing plenty of sunshine and daylight. For a free hospital, nothing more could be desired.

At the Physiological Institute of the School of Medicine, we met Prof. Houssay and his associate Dr. Biassoti. Prof. Houssay lectured on the func-

tions, normal and abnormal, of the hypophysis and showed us the complete set of the "Houssay dog" pictures. It was interesting to see these historical dog pictures here in this famous laboratory. Though Dr. Houssay is a very modest gentleman, he is one of the most outstanding men in medicine today. Some of the things Dr. Houssay emphasized were:

1. "It is important to maintain all internal secretions in a state of equilibrium.
2. "The body can make a small amount of glycogen without using insulin.
3. "Insulin production in the pancreas appears to be controlled by other hormones, one of which is of pituitary origin.
4. "The production and utilization of sugars are greatly influenced by the endocrines. These are the pancreas, pituitary, adrenals, thyroid, and gonads.
5. "The pancreas performs its function when denervated and blood sugar level continues unchanged; the same is true for liver, adrenals, and thyroid.
6. "Even a small amount of pancreas will maintain a normal glycemia.
7. "Infections of the anterior lobe of the pituitary causes hyperglycemia, and it may be that this lobe when overactive is a cause of diabetes.
8. "The anterior pituitary factor is best known; the adrenals, thyroid, and gonads are in all probabilities, also highly involved in diabetes."

The surgeons in our party were very interested in the work of Dr. Guiterrez. He has used epidural anesthesia in 3,400 cases without a fatality. He uses 40 cc. of a 2 per cent or 60 cc. of a 1.5 per cent solution of novocaine. Based on the physiological fact that the epidural space has a negative manometric pressure it is not difficult to allow the novocaine solution to be drawn in. This space can hold as much as 200 cc. of fluid. Under his method this is a very safe anesthesia but great care and a thorough knowledge of details of the technic are necessary for successful work. Thirty-five cc. are sufficient for a breast amputation or resection of the stomach. Hernia can be done with 25 cc.

Dr. Guiterrez has devised a special operation for nephropexy, and also the operation demonstrated to us by Dr. Montenegro at Sao Paulo for difficult inguinal hernia where he transplants the sartorious muscle under the cord and attaches it to the rectus muscle.

He used Delbert's plaster splints for fractured ankles. They consist of two strips of plaster, one on each side, from below the knee to the sole of the foot, then a figure-of-eight plaster from the lower end of the lateral splints up and crossing the back of the ankle just above the tendo Achillis, then forward over the front of the leg a circular plaster unites the upper ends of the splints. This allows free use of the ankle joint and is a good ambulatory splint.

On numerous occasions we were warned by different doctors on the various programs, that we must not miss the work of Dr. Robertson-La Valle, a famous surgeon here. He was not on the regular program because his work is not accepted by all members of the profession in Buenos Aires. Some of us were escorted to his hospital at 10 o'clock at night. Here we were greeted by 15 or 20 doctors who, under the direction of Dr. Robertson-La Valle, gave a clinic of his remarkable work. We saw patients and X-rays in rapid succession till a late hour, and then saw him perform his operation for tuberculosis of the spine. He claims that the surgical interruption or maceration of the early lesion or "tuberculous chancre" liberates the pent-up immune bodies in such abundance that the patient can be cured in a short time. Thus he claims he has found a very revolutionizing method for treatment of both pulmonary and bone tuberculosis.

Many of the best doctors in Buenos Aires were his most enthusiastic disciples while many more were bitter in their denunciation of this work. At a banquet table several doctors at my left were praising his methods; while a very prominent surgeon at my right said in the most digusted tone, "Most of his patients are dead". I have received several letters, case histories, and X-rays since my return home in which he demonstrates rapid cures, and states that the government is now recognizing and encouraging his work. I am not convinced but very interested.

On April 20 we visited the Institute of the Benevolent Society of the capital. Prof. Ramos did a Cesarean section on a patient with contracted pelvis. The patient, a primipara, had been in labor two days. Ether anesthesia was used. The patient was placed in a unique position, the legs being spread and held over stirrups. This allowed the second assistant to stand between the legs. Prof. Ramos had good technic. He sutured the peritoneum to the skin before opening the uterus. Dry towels were used within the abdomen. A transverse low incision was made through the visceral peritoneum of the uterus which was reflected up, then a midline incision of the muscle was made. After delivering the fetus with forceps, he injected pituitrin intravenously and allowed the placenta to deliver spontaneously, which it did in ten minutes without much bleeding. The suture line in the wall of the uterus was covered by the reflected peritoneum.

Prof. Ramos also operated on a case of multiple fibroids of the uterus. By careful enucleation he removed the several fibroids and reconstructed the uterus using the Reverdin needle. He said she would be able to bear children again.

We visited clinics at the University of La Plata, a city about 30 miles auto ride from Buenos Aires. Demonstrations under the direction of Dr. Nicholas Romano, the dean, were especially good. Cases were presented of hyda-

tid cyst, also a patient with amoebic infection with enlargement of the liver and a hugely distended gall bladder. It was treated with emetin and a return to normal was shown by X-ray. A very enthusiastic group of doctors entertained us with a banquet luncheon at noon at the Jockey Club. A large table elaborately decorated with high masses of beautiful red roses greeted us, and at no place in South America did we find a more friendly hospitality. Our stay in La Plata was but one short half day, but the joy of being their guests will be long remembered.

We visited the Hospital Sanatorio de Llanura e Vincente Lopez y Planes which is the tuberculosis sanatorium located 40 miles from Buenos Aires. We were met by Dr. Florencio E. Boneo who is medical chief. The fine staff of doctors, the extreme cleanliness of every ward, and the efficiency of every phase of the medical and surgical work was a distinct credit to Buenos Aires, and a compliment to the genius of its director. X-ray studies were shown and many cases of thoracoplasty and pneumothorax were presented showing good results. One case of bilateral pneumothorax was shown with satisfactory collapse of cavities.

In reviewing the happenings of this one week in Buenos Aires, we must conclude that it was a week brim full of fine medical things, but it was especially extraordinary when one considers the fact that only forenoons were given to them. Every afternoon and evening was amply provided for in the schedule and was given to special trips into the interior, visits to beautiful parks, entertainment in private homes and clubs. These people made us all feel the greatness of their fine hospitality and kindness. Especially to be remembered is the launch trip to El Tigre, a part of the Parana Delta, a series of winding rivers and canals which is the Aquatic playground of Buenos Aires. Then a visit to Polermo Park, which was strikingly beautiful, and the afternoon spent at the horse races as guests of the Jockey Club was very enjoyable. The official reception at the Capitol by the president and other high government officials was educational and impressive.

On Thursday evening, April 22, the reception at the American Embassy was a happy and jolly occasion, and again we were made to feel that our country was well represented by such a group of real Americans. That evening at the Hotel City was the final farewell banquet given by the American Express Company in honor of Dr. Peck, who was to leave us here and return to the United States. A grand banquet dinner it was with everything from Argentine bovine soup to Brazilian nuts. Many snappy remarks made by Argentine doctors and members of our own group lent sincerity and jollification to the farewell atmosphere. Truly our stay was too short. Early next morning, when we left by train for Mendoza, we were flattered by seeing many of our Buenos Aires friends who came at that hour to say goodbye. They gave us baskets of the fall fruits, which were to bolster our spirits as we took the wearisome journey in taxis over the high Andes next day.

The trip over the Andes Mountains was nothing short of a series of thrills. Fords and Chevrolets are used as taxis because of the many short hairpin curves on the steep mountain sides. Comparisons with our Rockies are most striking. Up in these mountains it never rains, nothing grows, not even a blade of grass. In some places great peaks loom up to over 20,000 feet and Aconcogua with its 24,000 feet and snow cap was a grand sight. Some places a high mountain could be seen with great pinnacles standing high from the top all in a deep green color, due to the rich deposit of copper. Copper is so plenteous at the ocean in Chile that it is unnecessary to mine in this region. The descent from the top of the pass at 13,000 feet down to the river below is very steep and one of our party counted 132 hairpin turns in a very few miles. The journey is very dangerous and we traveled over a one-way road, starting at 5:00 A.M. at Mendoza and arriving at 10:00 P.M. in Santiago, a long and hard, but interesting journey.

CHILE AND THE WEST COAST

Santiago, Chile is a beautiful city of about 800,000 population, at the foot of the Andes. There was but little preparation for our medical entertainment but there was much of interest to see. Hospitals were antiquated and modern equipment was scarce. The visit to the medical school of the University of Santiago was inspiring. It is over 100 years old, the oldest in South America, and its antiquity, as revealed by the old buildings, immense high columns at the entrance, ancient looking class rooms and spacious halls, all must be a tremendous stimulus to the young student to live up to the school's fine traditions and to strive to be a worthy part of its immediate future.

Prof. Mardones, director of the medical school, was very interesting. His pathological laboratory was a credit to any school and gave evidence of the influence of his student days in Germany under Virchow. Dr. Mardones' work on nutritional diseases in Chile was interesting as well as the discussion by Prof. Noyes on parasitology. The brief acquaintance we had with Prof. Allisandre, surgeon and clinician, was well worth the whole trip. He is one of the talented sons of the President of Chile, a democratic, practical minded doctor who is attempting to educate the people of Chile in the fundamentals of personal and public health, which is one of the greatest needs of these people.

At the Hospital St. Vincent de Paul we saw

good surgery of the gall bladder, an appendectomy under percaine anesthesia, and a hysterectomy under ether. A coal stove was burning in one corner of the operating room while ether was being used. We had to trust their technic or walk out, and that wouldn't have been polite.

At the Radium Institute for Cancer we met Dr. Leonard Guzman whose work was very interesting. They have abandoned surgery for carcinoma of the cervix. They use small doses over a longer period of time in contrast to our usually accepted technic of using larger doses in a shorter interval.

We went by train to Valparaiso, arriving there in the evening. The falling leaves and cool breezes reminded us of a late September day. This was April 28. Several doctors met us at the train and gave us their plans for our stay there. They were insistent on some of our group presenting papers and clinics and were especially interested in the latest methods in treatment of diabetes. Through some tactful management we succeeded in convincing them that we had come to learn from them. We soon found that they had a full schedule for us and there was not a single lull in our visit with them. We were escorted to the nearby resort Vina del Mar, the Atlantic City of South America. The Hotel O'Higgins was a beautiful ultra-modern hotel with every convenience. From here we made our daily visits to Valparaiso clinics and hospitals.

At the Van Buren Hospital we saw cases of lymphogranuloma, here thought to be the fourth venereal disease, and is very common. Diagnosis is made clinically on inguinal and other lymphatic envolvement plus rectal stricture. A positive Frei test is of accepted value. Heavy metals, bismuth and antimony, are not satisfactory treatment. Sooner or later surgery is imperative, and a one stage colostomy is done. A varied clinic was given by Dr. Munnich; a case of diverticulum of the esophagus was successfully treated by a one stage operation, cases of carcinoma of the sigmoid, acute hemorrhagic pancreatitis, and goitre. Thoracoplasty is done often here. A case of teratoma of the testes was shown in which a positive Ascheim-Zondek test was done early thus making early surgery successful. A fine surgical result was obtained in one case in which an artificial esophagus was made anterior to the manubrium sterni. Food could be seen passing through without discomfort.

Dr. E. P. Reed demonstrated several good cases. Among others he showed a ward case of marked recurrent ascites successfully treated by continuous drainage through a metallic cannula. He gave a fine clinic on the varied manifestations of syphilis which is extremely common here. He said his professor in medical school told the class that when they would examine 10 patients in practice they would likely find 11 cases of syphilis. The explanation was that most likely the doctor had it.

Dr. Reed's sense of humor, his fine English, and his keen clinical interest made him an ever present joy to the visitor. At all the receptions and speech making his jolly interpreting was entertaining as well as to the point.

A treatment for acute rheumatic fever was of special interest at the Van Buren Hospital. They give sodium salicylate—one ounce in milk by duodenal tube in one dose; 200 cases have been so treated with satisfactory results.

A case of Addison's disease showed a paradoxical blood sugar curve after intravenous glucose and morphine. In Addison's disease after morphine the blood sugar falls while in normal cases the blood sugar rises.

Here they have an unusually large incidence of liver disease; amoebic abscess, chronic hepatitis and acute infectious jaundice.

We visited the Vina del Mar hospital. We found a very old hospital, erected 64 years after Columbus discovered America. Dr. Fricke, the director, displayed remarkably complete case records. He is planning for a new hospital. There is very good work done here and the doctors seemed energetic and up-to-date. Gastro-intestinal diseases were of the highest incidence; next in frequency was tuberculosis and thirdly, pelvic inflammatory disease. These doctors expressed their regrets that Paul de Kruif in his recent writings stated their obstetrical mortality was extremely high. A study of their records shows the opposite is true. In 1936 their obstetric mortality was 0.8 per cent and infant mortality was 4 per cent.

The Mayor of Vina del Mar gave a farewell banquet at the sea shore. There were 100 guests and the evening was a joyous one. They showed their hospitality and sociability to be wonderful. We saw them put on their Chilean Cuecua or their national dance which is a real thrill to see and puts most of our North American dances to shame. Some of our hosts spoke eloquently and well. Surely there is understanding, culture, and refinement in this country.

On May 1 we boarded the Grace Line boat, Santa Clara, to make our journey up the west coast northward. The weather was cool due to the Humboldt current from the Antarctics, which strikes the Chilean coast below Valparaiso and follows up to the middle of Peru, from where it turns toward Hawaii. This cool current causes the rains to fall several hundred miles off the coast and leaving no rain for this desolate and dry coast of Chile and Peru. There is no vegetation on the land here except in the mining towns and sea ports where man plants trees and shrubs. Antofagasta was the largest city between Valparaiso and Lima, Peru, and its many small boats lined up in rows near the shore

were loaded with copper bars to be shipped to the United States. The stops along the way were very interesting. There is much poverty in every city and the standard of living is extremely low.

The famous Chilean nitrate beds are of little value now since synthetic chemistry has produced a cheaper source. The guano deposits are still important as fertilizer. The trip through the area where these guano birds or sea ducks were so many was very interesting. These birds feed on the small sardine fish which are so plenteous here and we saw them fishing by the millions, from morning till night. The large pelicans were less numerous but were real fishermen also.

At Lima we saw a beautiful tropical city, broad streets and fine public buildings. The city is one of the oldest cities of the new world. It was built by the Spaniards on top of the ancient Inca city which they conquered.

Our next stop of importance was Guayaquil, Equador, a truly tropical city. Here we saw shabby public buildings, dirty streets, poorly built homes, and filthy market places. We visited the University of Guayaquil, were received by the President of the school, the dean of the School of Medicine, and other dignitaries, who were very courteous and took us through the antiquated lecture rooms, laboratories, library, etc. We were then escorted to the Municipal Hospital where we saw a few doctors with enough work to do that would make most of us throw up our hands and run in dismay. An interne told us that any time, day or night, the entrance to the clinic is crowded with these poor emaciated, richety natives. He said they work the day through, then close their eyes to it all and go to the interne's quarters and go to sleep. We visited their quarters and it was much like a dirty bunk house of a western lumber camp before they ever thought of sanitary requirements and inspections.

Here in this hospital were cases of bubonic plague, typhus, beri-beri, pellagra, yellow fever, and many other diseases. We saw in the laboratory stained slides of bacillus pestis. There was an epidemic of the plague in progress here at the time. When I returned to the ship I found myself covered by vermin—real jumping fleas and every type of pediculosis known, I'm sure. They were very interesting. I had no microscope but the telephoto lens of my moving picture camera afforded a good substitute. With the background of my white pillow, I could see insects with pinchers, spears, diggers, boreing lances, and every type of instruments of torture mother nature could conceive of. It took me three days to get myself free of these tropical friends. I had made no special efforts to conceal my plight from my traveling companions. However, if they too were infested they didn't say. I'll wager that they were struggling with the same army of torturers.

When I had finally killed the last bug with 30 per cent calomel ointment, the most effective weapon I found, I began to realize that bubonic plague is spread by the flea. I knew I had had many of them and that I'd been bitten a million times. This made me a bit uneasy until the ten days incubation period had passed and even yet I catch myself scratching when I think of those poor fellows in that Municipal Hospital in Guayaquil who were dying of the plague. From Guayaquil we sailed to Buenaventure, Colombia, where we added to our cargo of coffee. The main point of interest here was the prevalence of poverty and the low standard of living.

Our next stop was Panama. Here we saw the tropics minus the usual poverty; beautiful buildings, lovely residences, and well-kept public parks and gardens. The journey through the canal next day was especially fine because we had beautiful clear skies and a professional lecturer of the Grace Line explained the history of the canal and the many points of interest. Here, truly, are the crossroads of the world. There is no protective tariff and no local industry to protect, and many things can be bought at remarkably low prices.

We spent a day in Havana, and then sailed for New York. It was good to be back in our own country, where one enjoys free speech and the advantage of a civilization such as ours. To return home and practice medicine on a free and competitive basis, unhampered by politics and prejudice, was a happy privilege. Here medicine is recognized the best in the world because every doctor must do his very best or fall out of sight. Let him who advocates socialized medicine make a visit to these countries, where he can see the doctors at work and the sick under treatment. Competition stimulates the doctor in our democracy as it does the business man and the industrialist. If this is removed, then we will fall to the level of our friends who work by the six hour day, then take it easy.

854 NORTH BROADWAY.

I am indebted to all the members of our party for the use of their notes and particularly to Dr. J. H. Barach of Pittsburgh who consolidated them.

Typhoid Septicemia Treated with Sulfanilamide

Our brief experience with the use of sulfanilamide in the treatment of a typhoid septicemia leads us to belief that this drug may prove to be of value in the treatment of typhoid fever. The prompt response to treatment, the smooth clinical course, the absence of complications, and that the infection did not progress, together with a reduction in hospital expenses that is usually necessary in the treatment of this infection, have impressed us considerably.—W. E. Diffenbach, M.D., and Anton S. Yuskis, M.D., La Jolla, Calif. California and Western Medicine, Vol. 49, No. 2, August, 1938.

PLANS FOR 1939 ANNUAL MEETING, TOLEDO, MADE AT MEETING OF COMMITTEE ON SCIENTIFIC WORK AND SECTION OFFICERS

PRELIMINARY plans for the 93rd Annual Meeting of the Ohio State Medical Association, to be held at the Commodore Perry Hotel, Toledo, Wednesday and Thursday, May 3 and 4, 1939, were made at meetings of the Committee on Scientific Work and section officers, at Columbus, Sunday, October 30. Those who attended were: Committee on Scientific Work—Dr. Albert F. Kuhl, Dayton, chairman; Dr. C. C. Sherburne, Columbus; Dr. Claude B. Norris, Youngstown; Dr. Stanley D. Giffen, Toledo, and Dr. M. M. Zinninger, Cincinnati; section officers—Dr. John Noll, Jr., Youngstown, chairman, and Dr. Wm. P. Garver, Cleveland, secretary, Medicine; Dr. W. K. Allsop, Youngstown, chairman, and Dr. John V. Hartman, Findlay, secretary, Surgery; Dr. Howard P. Taylor, Cleveland, chairman Obstetrics and Gynecology; Dr. Ralph E. Boice, Toledo, secretary, Eye, Ear, Nose and Throat; Dr. A. T. Hopwood Orient, chairman, and Dr. Richard E. Stout, Cleveland, secretary, Nervous and Mental Diseases; Dr. Wm. Edward Blair, Lebanon, chairman Public Health and Preventive Medicine.

TENTATIVE SETUP APPROVED

Following a full discussion of recent annual meetings, the following general setup for the 1939 Annual Meeting was agreed upon:

WEDNESDAY, MAY 3

9:30 A.M. Opening Session, House of Delegates, Travertine Room, Lobby Floor, Commodore Perry Hotel.

10:30 A.M. First General Session,
Main Ballroom, Mezzanine Floor, Commodore Perry Hotel.

10:30-11:00 Ohio speaker
11:00-11:30 Ohio speaker
11:30-12:15 Guest speaker

12:15 P.M. Public Health Luncheon under the auspices of the Section on Public Health and Preventive Medicine.

1:30 P.M. to 3:00 P.M. Round-Table Conferences.

Conferences will be held on eight of the following subjects: wound infections; postoperative pulmonary complications; value of X-ray pelvimetry in obstetrics; use of protamine zinc insulin in diabetes; treatment of psychoses other than schizophrenia with metrazol; management of asthma; cholecystography; gastro-intestinal upsets in infants and children; office use and abuse of short wave therapy; serum treatment of pneumonia; use of sulfanilamide in meningitis; selection of endocrine treatment in treatment of sterility; treatment of fractures of the femur, and medical treatment of nephritic emergencies.

3:00 P.M. to 5:30 P.M. Meetings of three of the Scientific Sections:

Section on Surgery.
Section on Pediatrics.
Section on Obstetrics and Gynecology.

8:00 P.M. Second General Session,
Main Ballroom, Mezzanine Floor, Commodore Perry Hotel.
Addresses of two guest speakers.

THURSDAY, MAY 4

9:30 A.M. Meetings of three of the Scientific Sections:

Section on Medicine.
Section on Eye, Ear, Nose and Throat.
Section on Nervous and Mental Diseases.

12:00 Noon. Luncheon and Final Business Session of the House of Delegates.
Travertine Room, Lobby Floor, Commodore Perry Hotel.

1:30 P.M. to 5:00 P.M.—Third General Session, Main Ballroom, Mezzanine Floor, Commodore Perry Hotel.

Addresses by four Ohio physicians and two guest speakers.

8:00 P.M. Annual Banquet,
Main Ballroom, Mezzanine Floor, Commodore Perry Hotel.

SEVERAL INNOVATIONS

An innovation at the 1939 Annual Meeting will be the round-table conferences scheduled for Wednesday afternoon from 1:30 to 3:00 o'clock. The committee decided not to have a Scientific Exhibit this year. Another change in the program of recent years is the elimination of scheduled discussants in the section meetings. A period of 10 minutes will be allowed following each paper for general discussion.

The following rules and regulations governing the program were adopted by the Committee on Scientific Work:

RULES AND REGULATIONS ADOPTED

1. Each of the Scientific Sections (Medicine; Surgery; Eye, Ear, Nose and Throat; Obstetrics and Gynecology; Pediatrics; Nervous and Mental Diseases; and Public Health and Preventive Medicine) shall be entitled to one session.

2. Section sessions will be held as follows:

May 3, 3:00 P.M.—Surgery, Pediatrics, and Obstetrics and Gynecology; May 4, 9:30 A.M.—Medicine, Nervous and Mental Diseases, Eye, Ear, Nose and Throat; May 3, Noon Luncheon, Public Health and Preventive Medicine.

3. Each section program shall consist of five (5) papers of 15 minutes duration, each to be followed by a period not to exceed 10 minutes for general discussion. No discussant shall be entitled to the floor more than once in the discussion of a paper and he shall be limited to 3 minutes for his remarks.

4. Only original papers shall be accepted, based on personal observation and direct experience of the essayist.

5. The section officers shall constitute the first board of selection. Final and official acceptance of the essayists shall lie with the Committee on Scientific Work and The Council.

6. Section officers shall endeavor to avoid duplications and repetitions from recent years, both in participants and subjects.

7. No member shall appear on any section program more than once at this Annual Meeting.

8. In submitting the names of essayists and titles of papers, section officers shall present an abstract of each paper, prepared by the essayist. Such abstract shall not exceed 150 words.

9. The Committee on Scientific Work may reject any essayist and require substitutions. Therefore, it is suggested that the officers of each section submit the names of a greater number of essayists and subjects than the required five (5), but indicating the preferred five (5) to assist the committee in making substitutions, if necessary, and in coordinating various section programs.

In inviting an essayist to take part in a section program, section officers should make clear to him that there is no assurance, at that time, that he will be scheduled in as much as all section programs must be passed upon by the Committee on Scientific Work as well as The Council of the State Association, and that frequently it is necessary to reject a speaker or subject to avoid duplications and to assemble a balanced Annual Meeting program generally. It should be pointed out that a speaker, in accepting the invitation from the section officers, need not submit at that time a complete abstract but only a general outline of how he intends to handle the subject assigned to him, or which he may select for himself. Places on the Annual Meeting program obviously are somewhat limited and, for that reason, it is impossible each year to schedule all who may be invited by the section officers or who may have applied for an opportunity to present papers.

10. Suggested programs should be submitted by Scientific Section officers to the Committee on Scientific Work no later than December 15, 1938.

11. To facilitate procedure, all communications and material should be sent to the Executive Secretary, State Headquarters Office, 1005 Hartman Theater Building, Columbus, Ohio.

Physicians who wish to appear on the section programs should make application immediately to the proper section officer. A complete list of section officers appears on page 1310 of this issue of The Journal.

Application blanks are now available for space in the Scientific Exhibit at the St. Louis Session of the American Medical Association, May 15-19, 1939. Attention is called to the fact that the meeting is a month earlier than usual, and applications close January 5, 1939. Blanks will be sent on request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn St., Chicago, Illinois.

Final Postgraduate Lecture Sessions Will Be Held Dec. 14 and 15

The eighth and final sessions of the Fall Series of the Ohio State Medical Association Regional Postgraduate Lectures will be held at Springfield, Wednesday, December 14; and at Mansfield and Zanesville, Thursday, December 15. The programs follow:

Springfield, December 14—"Arthritis: Medical Aspects", Dr. Louis A. Levison, Toledo; "Arthritis: Orthopedic Aspects", Dr. Walter G. Stern, Cleveland.

Mansfield, December 15—"Arthritis: Medical Aspects", Dr. Russell L. Haden, Cleveland; "Arthritis: Orthopedic Aspects", Dr. J. I. Kendrick, Cleveland.

Zanesville, December 15—"Intestinal Obstruction", Dr. E. R. Arn, Dayton; "Common Lesions of the Cervix; Differential Diagnosis and Treatment", Dr. Philip J. Reel, Columbus.

All meetings begin at 7:00 P.M. Sessions at Springfield are held in the Hotel Shawnee; in Mansfield at the Hotel Mansfield-Leland and at Zanesville, at the Grotto Hall, corner Fourth and Market Streets.

First Lower Lecture Given

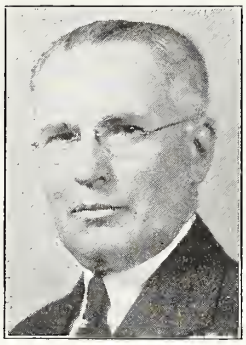
The initial William E. Lower Lecture of The Academy of Medicine of Cleveland was given by Dr. O. H. Perry Pepper, professor of medicine, University of Pennsylvania School of Medicine, November 18, in the auditorium of the Allen Memorial Medical Library. His subject was: "Diverticulitis of the Colon". This year Dr. Lower donated to the Academy a sum of money to endow a lectureship in medicine. One lecture will be given each year by an outstanding physician or by a scientist identified with some field of work closely allied to medicine. The gift imposes no restrictions on the subject discussed, except that it be of general interest to the medical profession.

DRS. LEFEVER AND PHILLIPS ELECTED TO OHIO GENERAL ASSEMBLY; DR. SMITH, MARION, WINS CONGRESSIONAL SEAT

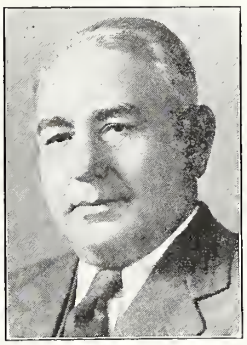
TWO members of the Ohio State Medical Association who formerly served in the Ohio General Assembly were returned to the Assembly at the General Election on November 8.

A veteran legislator, Dr. Errett LeFever, Glouster, will represent Athens County in the House of Representatives for the next two years. Dr. LeFever, a Republican, held the same post in 1900-1901, 1904-1905, 1921-1922 and 1933-1934. He was a member of the State Senate from the Ninth-Fourteenth District, during the years 1923 to 1930. Dr. LeFever served on the Health Committee in both the Senate and the House.

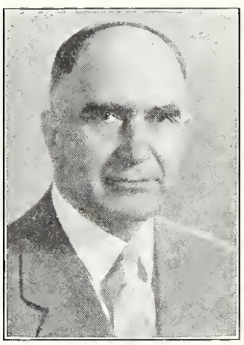
Dr. H. T. Phillips, Athens, Republican representative from Athens County and member of the Health Committee in the 91st General Assembly, 1935-1936, was elected to the State Senate from the Ninth - Fourteenth District, comprising Fairfield, Hocking, Morgan, Athens, Washington, and part of Noble and Monroe counties.



Dr. Phillips



Dr. LeFever



Dr. Smith

Dr. Frederick C. Smith, Marion, Republican, was elected to Congress from the Eighth District, which includes Crawford, Hancock, Hardin, Marion, Morrow and Wyandot counties. A member of the Marion County Academy of Medicine, Dr. Smith was elected Mayor of Marion in 1935, and was re-elected in November, 1937, by the largest majority ever given a mayoralty candidate in Marion.

Dr. Howard V. Dutrow, Dayton, Republican candidate for the State Senate from the Third District, Montgomery and Preble counties, lost a close race to Senator Don M. Thomas, one of the Democratic incumbents, who won by approximately 450 votes.

Dr. Oscar Hayes, Akron, Democratic candidate for the House of Representatives from Summit County, was defeated.

Successful candidates for county central and executive committees included the following physicians: Dr. W. L. Faul, Russellville, chairman of the Brown County Republican Central Committee; Dr. L. C. Pepper, Sidney, chairman of the Shelby County Republican Executive Committee; Dr. S. D. Clark, Cherry Fork, chairman of the Adams County Democratic Executive Committee; Dr. O. M. Kramer, Millersport, chairman of the Fairfield County Democratic Central Committee; Dr. C. J. Altmaier, Marion, chairman of the Marion County Democratic Central Committee; Dr. I. W. Curtis, New Concord, chairman of the Muskingum County Democratic Central Committee.

As a result of the election November 8, the Ohio delegation in the United States Congress for the next two years will be preponderantly Republican, and the G. O. P. will also have a large majority in the 93rd Ohio General Assembly which convenes at Columbus, January 2, 1939.

In addition to Robert A. Taft, Cincinnati, who defeated the Democratic incumbent, Robert J. Bulkley, for the U. S. Senate, the Republican party elected 15 of the 24 Ohio members of the House of Representatives. This gives the G.O.P. control of the Ohio's congressional delegations for the first time since 1930.

The State Legislature also went overwhelmingly Republican, with 100 of the 136 members of the House of Representatives and 27 of the 35 Senators, members of that party. The retiring Legislature consisted of 31 Democrats and 5 Republicans in the Senate and 105 Democrats and 33 Republicans in the House. Seventy of the 136 members of the new House and 15 of the 35 members of the Senate have had no previous legislative experience.

Caucuses of the Republican and Democratic members of the Senate and the House of Representatives will be held in Columbus early in December. At that time the Republican members of the house will select a speaker and a majority floor leader, and the Democrats will agree upon a minority floor leader. The Republican Senators will choose their floor leader, and the Democrats a minority floor leader. Committee assignments in the House are made by the speaker and in the Senate by a committee-on-committees.

EXCELLENT PROGRAM DRAWS LARGE ATTENDANCE AT ANNUAL CONFERENCE OF OHIO HEALTH COMMISSIONERS

APPROXIMATELY 350 city and county health commissioners, public health nurses and sanitarians attended the Nineteenth Annual Conference of Ohio Health Commissioners with the State Department of Health, Thursday and Friday, November 17 and 18, at the Deshler-Wallick Hotel, Columbus. Attracted by an exceptionally fine program, the conference was one of the best-attended in the history of such meetings.

Dr. Walter H. Hartung, State Director of Health, opened the conference with a brief address in which he expressed his appreciation to the health commissioners for the cooperation they have given his department during the past four years. He called attention to the comprehensive resumé of the activities of the State Department of Health since January 1, 1935, which was furnished to all those in attendance. Some of the accomplishments cited in the report were: Establishment of the Division of Public Health Nursing and the Bureau of Dental Hygiene and the increased activity of the Bureau of Occupational Diseases, the Bureau of Plumbing Inspection, the Division of Vital Statistics, the Bureau of Venereal Disease Control and other departments. In January, 1935, there were 91 employes in the State Department of Health. At the present time there are 167. In 1935 there were 76 full-time health units in Ohio in 40 counties and 36 cities; there are now 88 full-time units in 50 counties and 38 cities, and in these districts there are 33 sanitary engineers and sanitarians.

Looking into the future, Dr. Hartung expressed the hope that the legislative program of the incoming administration would include provision for increased facilities for hospitalization of those afflicted with tuberculosis. He pointed out that due to inadequate local funds, many tuberculers could not be provided with proper hospital care. Dr. Hartung recommended that an addition be built to the State Sanatarium at Mt. Vernon or that another institution be built elsewhere. The legislature also should be asked to appropriate sufficient funds so that the $300,000 state subsidy to local health districts could be paid in full, Dr. Hartung said.

Qualifications of Public Health Personnel Are Summarized

In a discussion of the "Qualifications of Public Health Personnel", Dr. John Sundwall, professor of hygiene and public health, University of Michigan, traced the evolution of the modern public health movement in the United States through three periods: one, from 1850 to 1870, when the miasmatic theory of disease predominated, penalties for maintaining nuisances began to appear in the statutes, and the sanitary police inspector was the health officer; two, from 1870 to 1918, the era instituted by Pasteur—the golden age of bacteriology, when the bacteriological laboratory became important in public health work, and methods of controlling the various routes of the dissemination of disease, such as water supply and sewage disposal, were developed, and professionally trained sanitary engineers and bacteriologists utilized; three, since 1918—the period marked by the inception of the World War, when the "results of physical examinations of prospective draftees shattered delusions in regard to the general physical condition of the people of the United States".

Dr. Sundwall stated that out of 2,300,000 men examined, 21 per cent were sent home because of physical defects and approximately 50 per cent were found to be in need of medical and surgical attention. This situation resulted in the shifting of public health interest to the human being as the center of the picture, he said.

Dr. Sundwall stated that the successful public health officer of the present era must have a broad cultural education, and a knowledge of bacteriology, epidemiology, physiology, sanitary engineering, immunology, economics, political science and sociology, keeping up with the procession by reading professional and scientific journals and attending postgraduate courses.

Future of Public Health Work Is Forecast By Dr. Freeman

Dr. M. C. Hanson, health commissioner of Toledo, presided at the Thursday afternoon session, which was opened by Dr. Allen W. Freeman, professor of hygiene and public health, Johns Hopkins University, by an address on "Present Tendencies in Rural Health Organization".

Dr. Freeman, a former health commissioner of the State of Ohio, discussed the development of local health organization in the state, from the period prior to the organization of the State Board of Health in 1886, when there was no provision for public health activity in rural areas, except the quarantine authority given township clerks.

"Immediately upon the organization of the State Board of Health efforts were made to improve this situation", he said. "The board first attempted to secure medical correspondents in cities and villages where there was no board of health. The first president of the board advocated a system which would provide for the appointment of county health officers; would re-

quire each incorporated city and village to maintain a board of health; and would require the township trustees with the township clerk, to act as a board of health for all township area outside a city or village. It was some time, however, before this program was put into effect. In 1885 the legislature required that all cities and villages with a population of 500 or more would establish a board of health, but not until 1893 did the legislature make any provision for that part of the state living outside of the cities and villages.

LITTLE REQUIRED; LITTLE EXPECTED

"This system, built up with so much effort between 1886 and 1893, provided only for a board of health and a health officer. The health officer was not necessarily a physician in the townships and villages. Most of those appointed under the law were laymen. Not very much was required of them by the law and not very much was expected by the people they served. They were charged, generally, with only two responsibilities: the quarantine of cases of communicable diseases and the abatement of gross nuisance. Although the system was not efficient, it was about all that could have been had at the time, and it remained in operation for some 20 years."

Dr. Freeman related the history of the passage of the Hughes-Griswold Act in 1920, which provided a system of city and county health departments, and did away with the 2,300 existing separate health jurisdictions, each with a separate health officer. He said that the proponents of the Act had in mind a unit of organization large enough to support a full-time health officer with an adequate technical staff.

"They did not believe that any field activity in public health could be carried on effectively from the State Capitol. Public health was essentially a local business, demanding for success a continuous and intimate relationship between the population served and the agency serving it", he said.

Commenting on significant changes in major procedures of public health which have occurred since the present Ohio system was established, Dr. Freeman said that these functions represent "an intensification rather than an expansion".

WHAT ABOUT THE FUTURE

Continuing, Dr. Freeman said:

"In looking to the future, we must recognize this central fact: that the development of public health in the last 20 years has been in the direction of supplying certain preventive services to people who have no physicians and could not otherwise obtain them, and also to people whose physicians for one reason, or another, do not render these services. For the future, therefore, what have we to expect? Prophecy is always dangerous; the best that anyone can do is to judge that events having tended in a certain direction for a certain time, will probably continue to tend in the same direction, but even this method is beset with error and disappointment. Considering present tendencies, however, it would appear that they lead in one of two possible directions, either of which is of tremendous importance in planning the health service of the future. If our present system of medical practice continues, it seems inevitable that the health department will be called on to supply an increasing amount of preventive medical service, definitely clinical in character, not only to the indigent but to those unable to secure it from the private physician even though able to pay. We have had 20 years of growth of this tendency without check; there is no reason to believe that growth will not continue and that health departments will not be called upon for greater and greater enlargements of these services.

"The pressure for a change in the form of our medical service has been steadily increasing for a number of years, and cannot long be resisted. This is not the time nor the place to discuss the future of medical practice except as related to public health, and it is, in fact, difficult to form any opinion as to just what changes will result from present movements. It is possible that we shall have a national system of insurance against sickness somewhat on the British model. Should this happen, the relations of the health department to the population and the demands made upon it, will continue along the lines we have already discussed. Should the medical profession succeed, as is sincerely to be hoped, in devising plans whereby groups of physicians will assume responsibility for the medical care of individuals or families for a fixed sum per annum, we may expect a considerable decrease in the demands on health departments from that group of the population able to avail itself of this service. Groups of physicians will undoubtedly find it much easier and cheaper to keep people well by efficient preventive service, than to take care of them when they are sick. This would leave only the indigent to be cared for. Should the state contract with these groups of physicians for medical care, the indigent likewise will receive preventive service, and the load on the health department will be correspondingly reduced. Should the state, however, put the medical care of the indigent in the hands of the health department, the load will be correspondingly increased.

"Health departments face, therefore, in the immediate future, happenings which may profoundly change their future development. The demand for an increasing amount of preventive medical service will not abate. The medical profession has a chance to meet this demand. If it is met adequately, little will be left for the health departments to do, other than our time-honored police measures in connection with communicable disease and sanitation. If the medical profession does not meet this demand, fully and for all classes of the population, the health department will be called upon to supply it. Communicable disease and sanitation represent only minor aspects of a larger service which will be almost completely clinical in character, and which will make new and vastly greater demands upon the skill, energy, wisdom and statesmanship of the health officer of the future."

BELIEVES CHANGE IS COMING

Pointing out that there was a tremendous popular demand for a change in the economic basis of the practice of medicine, especially from

organized labor and farm organizations, Dr. Freeman said that he was firmly convinced that there would be a change, although he was unable to predict just what change might be made. He said he was opposed to the British panel system and to the completely socialized system of the Soviet Union.

Dr. Freeman concluded his address with a plea to the health commissioners to use their influence on their representatives in the legislature to the end that public health work would be adequately financed; that the office of State Director of Health be taken out of politics and continuity in office assured, and that all public health personnel be placed under civil service.

Relationship Between Mental Hygiene and Public Health Programs

"Mental Hygiene and Public Health", was the subject discussed by Dr. Henry C. Schumacher, director, Child Guidance Clinic, Inc., Cleveland.

"Those of us who are working in the field of mental hygiene broadly considered have become increasingly aware of two great needs. First and foremost, the work must have a broader base. It cannot be left to a few specialists. It must embrace the entire profession of medicine. That means that all doctors and their assistants and co-workers must become increasingly more aware of the mental implications of the problems that confront them in their everyday tasks. And secondly, the emphasis must be placed on prevention. It is quite apparent to anyone who will stop to think, that progress in public health comes mainly through prevention and not through the establishment of resources for the care of the sick and the ill", he said.

Dr. Schumacher called the attention of public health officials to mental hygiene implications in the work usually carried on under their auspices, e.g., prenatal clinics, child welfare centers and pre-school clinics.

"It is my opinion that school physicians and school nurses trained in the mental hygiene implications of their jobs with opportunity to use such knowledge would be of tremendous value in a preventive and early curative program in the field of mental hygiene. Furthermore, it would center this work where it belongs, namely, in the hands of medical personnel", he declared.

Methods of Pneumonia Control Are Outlined By Dr. Blankenhorn

Dr. M. A. Blankenhorn, director of the Department of Internal Medicine, University of Cincinnati, College of Medicine, spoke on "Pneumonia Control in Ohio". He told of the excellent results that have been obtained in the serum treatment of pneumonia at Cincinnati General Hospital. Since the development of a rapid method of typing and the use of more potent anti-pneumococcus serum given within 24 hours, he said that the mortality rate at the hospital had decreased 76 per cent on types 1 and 2, in the past three years.

Explaining that there are 32 types of pneumonia, Dr. Blankenhorn stated that there must be more bacteriological research in the field.

Discussing some of the problems of serum treatment, Dr. Blankenhorn said that it was not being very widely used because of its cost. He said that arrangements should be made for the training of more typers, and that the administration of the serum in the hands of a good physician need not be considered an expert procedure. He emphasized the necessity of early treatment of the disease.

Dr. James M. Ruegsegger, of the Pneumonia Research Division of the University of Cincinnati College of Medicine, showed some interesting colored motion pictures in explaining the typing courses conducted during the past year at Cincinnati General Hospital.

Dr. Hein is Guest Speaker at the Annual Banquet of Conference

In his address at the Annual Public Health Dinner on Thursday evening, Dr. Barney J. Hein, Toledo, President of the Ohio State Medical Association, stated that he felt that maximum efficiency in matters of public health education and prevention of disease cannot be obtained unless there is the closest cooperation between state and local health departments and the medical profession of Ohio.

Dr. Hein's remarks were, in part, as follows:

"I am happy to report that this spirit of cooperation is becoming more manifest. The relationship which exists at present between the State Department of Health and the Ohio State Medical Association is one of cooperation and mutual helpfulness. Your director, Dr. Hartung, has talked over his problems with official bodies of the State Medical Association and has received, I believe, many helpful suggestions and active assistance. Likewise, we have discussed with him some of our problems and he always has made available to us his advice and the facilities at his command.

MUST BE COOPERATION

"This same spirit exists in most parts of the state between the local health departments and the local medical societies. Incidentally, many of the most efficient health officers of the state are active members of their county medical society—some of them serving as officers of the society. This in my opinion is a good sign and should be encouraged. Occasionally, some over-zealous or thoughtless public health officer initiates some program before talking over the matter with his local medical society and subsequently finds himself confronted with difficulties which could have been avoided had he exercised a little diplomacy. However, these instances are few and far between and I believe will gradually disappear. Differences can be avoided and even if they arise

can be dissolved if both sides will only get together, learn the problems to be solved and both assume some responsibility in solving them. An intimate understanding and a tolerant attitude on the part of both the health department and the medical society are essential to harmony and efficiency.

"I urge all of you to take your local medical society into your confidence. Lay your problems before it; request constructive criticism and suggestions concerning your programs; give the medical society and the individual physicians of your community an opportunity to help you and share some of your responsibilities.

MEDICAL SOCIETIES SHOULD HELP

"We have been urging all of our component county societies to take an active interest in the affairs of local health departments and through special or standing committees to assist local health officers in discharging their duties and initiating programs which may be needed. We have been quite frank in stating that cooperation means just that—joint action—and that the medical profession must obligate itself to do its part. We hold no brief for the medical society which refuses to meet its responsibilities in the field of public health and preventive medicine. Where real cooperation exists, there are no serious conflicts between the health department and the medical profession and good public health programs are being conducted.

"Why is the physician such an important factor in public health work? You know the answer but it is something which cannot be overemphasized. Although the physician is in many respects an individualist and it is difficult at times to get him interested in what might be termed the mass attack on disease and suffering, he is in the final analysis the first line of defense against sickness. As we turn back the pages of medical history we find that he always has been, as he is now, the key man for most people in all matters pertaining to health. The physician can and should become the salesman of the values and benefits of good public health administration and preventive medicine. The physician is proud of the part his profession has taken in the advancement of both preventive and curative medicine and he has a right to be proud. However, he needs to be encouraged to take an active part in seeing that the benefits of preventive medicine are widely distributed and that as a physician he must be interested in seeing that sound and effective public health programs under proper administration are carried on in his community. This is a job which you as public health administrators and those of us who hold official positions in medical societies must assume.

CURRENT MEDICAL PROBLEMS

Commenting on current efforts to change the American system of medical practice, Dr. Hein said:

"At present there are three questions which are receiving an unusual amount of attention wherever physicians assemble, at gatherings of laymen, and in the public press. I mention them because in the final analysis the health of the public is involved in each. They are: (1) Furnishing of adequate medical service for the indigent; (2) provision of better methods of providing adequate medical care for the lower-income groups; and (3) proposals which have been offered to revamp the present methods of distributing medical care and expand public health services. I know you are interested in these questions, so permit me to discuss them briefly.

"Previous to the 'great depression' the problem of furnishing medical care to the needy was not great—at least it was not considered a serious problem. The needy were supplied with necessary medical care by individual physicians as a part of their regular practice. With the help of voluntary charitable organizations in many instances, this demand was met without any undue financial sacrifice by the individual physician. Some medical relief was furnished by local subdivisions. The depression changed the picture. With the increasing load of medical indigency, the physicians found that they had to look somewhere for financial assistance. As time went on, treasuries of local political subdivisions were drained and it became necessary for them to seek financial aid from the state and then the Federal Government. In many instances, the financial assistance received from all sources has been entirely inadequate and physicians have been rendering an increased volume of service for little or no remuneration.

"The problem of adequate and practical methods of financing and administering medical relief in Ohio is one of the most important subjects before the Ohio State Medical Association. A special committee is at work on this question and is making considerable progress. Information obtained from many counties shows that funds for medical relief are insufficient; there is a need for reorganization of administrative machinery; there is duplication in relief activities; overlapping of authority and responsibility; waste of effort as well as money. A new set-up is needed. The relief machinery must be overhauled. Medical relief must be recognized as much a part of general relief as food, clothing, shelter, etc., and adequate provision must be made for financing it. Our Association must lead the way and I am confident that at the appropriate time we will be prepared to offer and sponsor legislation to correct and improve the administration of medical relief. Our committee would appreciate having constructive suggestions and ideas on this question if any of you care to offer them.

WHAT OHIO PROFESSION IS DOING

The second question which is commanding the special attention of the Ohio State Medical Association is that having to do with improvements in methods of distributing medical care to the low-wage group. This, of course, is not a new problem but it has been accentuated by certain events and the prevalent social unrest.

"We recognize that there is a problem and that efforts to solve it should be undertaken. However, we believe that these efforts should be initiated and supervised by the medical profession through its constituted medical societies, with the assistance of allied groups. No one understands more about the ravages of disease and injury than the physician; no one has been more sympathetic. The medical profession has a deep and sympathetic interest in the problems of the low-wage earner. It is aware of the crisis which he faces when sudden illness or injury strikes him or some member of his family. We stand ready and willing to help him.

"Many plans are being tried throughout the country in an effort to solve this very problem. In our own state there are four or five such plans being worked out under the control of the local medical society or academy of medicine. Some plans which have been started have failed; others are working fairly well. Mistakes have been

made and will be made in the future, but surely some good will come from all this pioneering and experience. Eventually valuable information will be obtained on which a skeleton plan can be based, which can be offered to local medical groups for local adaptation. It is essential that we move cautiously to avoid the evil practices which have accompanied some of the programs put into effect and which are inherent in some of the proposed plans. Incidentally, it strikes me that one of the tendencies in so many plans has been to overlook the important point that good medical care cannot be had at a cheap figure. There must be an educational campaign aimed at acquainting the people with the value of their health and the evils of bargain-counter medical service.

"Let us pass to the third question which in a way includes the two already referred to. There probably will be introduced into the legislative hopper at Washington during the coming year, various bills proposing to expand the activities of the Federal Government in the fields of public health and medical care. The basis for most of these measures undoubtedly will be the report recently issued by the Interdepartmental Committee appointed by President Roosevelt several years ago. Time will not permit a detailed review of proposals made by the committee. However, a few general observations and statements are in order.

SOME PROPOSALS APPROVED

"First, I am of the opinion that the medical profession generally is in agreement with some of the proposals offered. The profession, in my opinion, will not and should not object to a reasonable expansion of public health activities, providing administrative procedures are delegated to local communities, provision is made for cooperation of local medical societies, and services contemplated do not include the treatment of disease except in so far as this cannot be successfully accomplished through the private practitioners of medicine. Expansion of hospital facilities where need exists is a suggestion of merit. However, I believe that the profession would favor financial aid for existing hospitals and related institutions for the hospitalization of the indigent or near-indigent before a building program is launched which, incidentally, might become unnecessary if full use is made of present hospital facilities. No objection could be raised to financial aid on the part of the Federal Government to local communities for the purpose of improving medical services for the indigent and reimbursing physicians for their services, but administration must be left in local hands. There are other parts of the proposed 'national health program' which would, I believe, have the support of the medical profession generally.

"However, I am convinced that the medical profession will not favor or foster any system of compulsory health insurance or any other plan or program which would create political and governmental domination of the practice of medicine. Bureaucratic systems of medical service produce low standards and poor medical care. Governmental interference and supervision must be kept at a minimum. Governmental medicine as practiced in many European countries has been appraised and we know too well that such systems have produced few, if any, benefits but many evils. Governmental medicine invariably leads to standardized medical mediocrity. It does not set standards of practice but always has been a poor follower.

CANNOT SACRIFICE IDEALS

"The medical profession feels that the welfare of the public is something which always must be recognized and regarded as an item of prime importance. Physicians must strive to maintain the high standards of practice existing in our state. We cannot sacrifice any of the high ideals which have motivated medicine in the past. Ideals and standards can be maintained and good medical care provided under the present system of physician-patient relationship and the principle of free choice of physician for all. There is a line across which government, for the good of the people, should not step. If government performs efficiently the duties which are recognized as rightfully the functions of government, it will have its hands full. There are many fundamental problems waiting to be solved. For example, imagine the good which will come from well coordinated programs for the improvement of food, housing and the other environmental conditions which have the greatest influence on the health of our citizens. Good medical care for all is essential but less medical care will be needed if conditions which cause illness and injury are attacked, and some of the economic problems which confront the low-wage groups would automatically be solved."

Pointing out that the aims of the physician and the public health commissioner are identical —"improving the health and welfare of the people", and that the physicians of Ohio are intensely interested in public health activities, Dr. Hein said:

"The health officers cannot ignore the problems of the practicing physician. The practitioner must work with the health officer in his field and try to understand his problems. Maximum service to the public can be rendered if the health officer does his work well, if the private practitioner provides complete and competent medical care, and if the health officer and the private practitioner join hands in attacking those problems which are community-wide in scope".

Treatment of Contagious Diseases and Nursing Problems Discussed

Dr. Edward Blair, Lebanon, health commissioner of Warren County, presided at the Friday morning session, at which Dr. John A. Toomey, director of contagious diseases, Cleveland City Hospital, spoke on "Newer Phases in Diagnosis and Treatment of Scarlet Fever, Measles and Whooping Cough". Dr. Toomey said that the use of scarlet fever antitoxin, purified product, is a perfectly logical procedure in the treatment of scarlet fever; whooping cough serum may or may not cut down the severity of the disease, and that measles can be prevented by the use of human convalescent serum, adult serum or commerical placental immune globulin.

* * *

"Making Public Health Nursing More Effective", was the subject discussed by Miss Pearl McIver, R. N., Senior Public Health Nursing

Consultant, United States Public Health Service, Washington, D. C. Miss McIver stated that the goal towards which public health nurses are striving is a complete family health service available to every family regardless of economic status or whether family is located in a rural or urban area, adding:

"Public health nurses know that they cannot reach that goal alone. The attainment of such an objective requires the perfect functioning together of all groups concerned with health conditions and nursing is but one of those groups. It may be several years before such a goal can be realized, but in the meantime the effectiveness of public health nursing may be increased if we may rely upon the health officers and others in administrative positions to help: (1) In securing enough public health nurses in each community so it will be possible to render a type of service that will bring results; (2) in promoting sound educational qualifications, and as was said at the American Public Health Association meeting in Kansas City: 'Employ nurses because of what they know rather than because of whom they know'; (3) by generalizing the whole nursing service so that each nurse will be responsible for all nursing service needed by the families in a circumscribed area; (4) by providing adequate nursing supervision, or utilizing the service offered through the State Health Department. A continued program of learning is necessary if any worker is to remain efficient; (5) by improving the administrative techniques of the health department so that the nurses will not be handicapped by: (a) a clinic or private physician's service which belies the promises made by the nurse in the home; (b) a lack of information with regard to other health services which that family may be having; (c) program policies which prohibit her from meeting the nursing needs of the family as she encounters them".

Ohio's Public Assistance Goals and Programs to Control Syphilis

Judge Henry J. Robison, chief, Division of Public Assistance, State Department of Public Welfare, spoke on "Public Assistance Goals", at the Friday afternoon session, at which Dr. F. E. Mahla, assistant state director of health, presided.

Judge Robison stated there are 11,000 families, with 35,000 children, now receiving the benefits of the Aid to Dependent Children program in Ohio, and that over 3,500 crippled children are being treated under the supervision of the Division of Public Assistance. He said that over 5,000 families are on a waiting list for A.D.C. help, which is not available because of insufficient local funds.

In discussing the health aspects of the various programs administered by his Division, Judge Robison expressed his appreciation of the cooperation which he and his associates had received from the officials and committees of the Ohio State Medical Association, and from county medical societies.

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Dr. Samuel Goldblatt, venereal disease consultant, Cincinnati Department of Health, concluded the conference with an address on "The Control of Syphilis—What a Health Department Should Do".

Summarizing his suggestions, Dr. Goldblatt said:

"It is evident that the first step of the health department in controlling syphilis should be to make a survey to determine the incidence, social and economic stratifications and geographical distribution of syphilis in its community. In this connection it is necessary that the health department officers, clinicians and private practitioners have their index of suspicion as regards the presence of syphilis raised to its highest possible level.

"It is the function of the health department to determine what its present facilities are for the treatment of this disease. This should include not only the number of clinics, but the efficiency of their operation and the training of their personnel, as well as the training of the private practitioner in the community.

"It must be borne in mind that neither the clinic nor the private practitioner is justified in the treatment of the syphilitic, unless such patient is given the advantage of adequate physical and serological examinations before treatment is started, and that facilities must be had for the repetition of these examinations when necessary to determine the progress of the patient.

"The present treatment facilities must be evaluated in the light of our knowledge that only 20 per cent of our potential load has any knowledge of its disease, and that probably less than 5 per cent of the potential load are at present under treatment.

"It should be one of the functions of the health department to coordinate all public and private clinic activity in its own community, to prevent overlapping and for the purpose of obtaining maximum efficiency from every agency engaged in combating this scourge. . . .

"Treatment is the only effective means of overcoming syphilis. . . .

"Indigents should be treated in well-equipped clinics or by their own private physicians who are subsidized by the state.

"It is the function of the health department to offer consultation service wherever possible, and to aid in the postgraduate training of physicians who are treating syphilis.

"It is the function of the health department to see to it that the laboratories used for the diagnosis of syphilis, utilize the best in serologic technics with regard to specificity and sensitivity. In the conduct of any clinic the use of routine serologic technic for the determination of syphilis in the unsuspected case, is imperative. Examination of spinal fluid is highly desirable before treatment starts, and is imperative before the patient is released from treatment. . . .

"It is the function of the health department to see that lapsed cases—both private and clinical—be returned for treatment until discharged by their physicians, by cooperative follow-up visits of the nurses, if possible; or by the use of quarantine measures if voluntary cooperation is impossible.

"Finally it must be borne in mind that the effective treatment of the syphilitic will result in a large saving of money to the community.

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Forty-one health commissioners attended the

annual Pioneer Breakfast on Friday morning. Included was Dr. George Lummis, who has been health commissioner of Middletown since 1890.

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Exclusive of members of the staff of the State Department of Health who attended the conference, the following city and county health commissioners registered:

County Health Commissioners—Adams County—Dr. Otto K. Engelke, West Union; Allen County—Dr. G. E. Miller, Lima; Ashland County—Dr. G. B. Fuller, Ashland; Ashtabula County—Dr. J. L. Hurst, Jefferson; Athens County—Dr. J. M. Higgins, Athens; Auglaize County—Dr. Roy C. Hunter, Wapakoneta; Belmont County—Dr. W. B. Baily, St. Clairsville; Butler County—Dr. C. J. Baldridge, Hamilton; Carroll County—Dr. Carl A. Lincke, Carrollton; Champaign County—Dr. C. E. Thompson, Urbana; Clark County—Dr. R. R. Richison, Springfield; Clermont County—Dr. J. A. Carter, Batavia.

Clinton County—Dr. W. K. Ruble, Wilmington; Columbiana County—Dr. Seward Harris, Lisbon; Coshocton County—Dr. W. A. McMichael, Coshocton; Crawford County—Dr. G. T. Wasson, Bucyrus; Cuyahoga County—Dr. A. J. Pearse, Cleveland; Darke County—Dr. W. D. Bishop, Greenville; Delaware County—Dr. B. B. Barber, Delaware; Erie County—Dr. F. M. Houghtaling, Sandusky; Fairfield County—Dr. W. R. Coleman, Lancaster; Fayette County—Dr. James F. Wilson, Washington C. H.; Franklin County—Dr. H. L. Mitchell, Columbus; Gallia County—Dr. F. W. Shane, Gallipolis.

Greene County—Dr. G. E. Savage, Xenia; Guernsey County—Dr. D. L. Cowden, Cambridge; Hamilton County—Dr. E. H. Schoenling, Cincinnati; Hancock County—Dr. S. F. Whisler, Findlay; Henry County—Dr. J. R. Bolles, Napoleon; Highland County—Dr. W. M. Hoyt, Hillsboro; Hocking County—Dr. W. B. Lacock, Logan; Holmes County—Dr. J. C. Elder, Millersburg; Huron County—Dr. R. P. Scott, Norwalk; Jackson County—Dr. B. J. Allison, Jackson; Jefferson County—Dr. J. P. Young, Steubenville; Lake County—Dr. C. B. Elliott, Painesville; Lawrence County—Dr. J. W. Payne, Ironton; Licking County—Dr. Edward M. Cass, Utica; Logan County—Dr. Lee Traul, Bellefontaine.

Lorain County—Dr. F. R. Dew, Oberlin; Lucas County—Dr. T. W. Mahoney, Toledo; Madison County—Dr. Robert Trimble, London; Mahoning County—Dr. S. G. Patton, Youngstown; Marion County—Dr. N. Sifritt, Marion; Medina County—Dr. I. B. Kievit, Medina; Meigs County—Dr. W. D. Ellis, Pomeroy; Mercer County—Dr. F. E. Ayres, Celina; Miami County—Dr. K. C. Becker, Troy; Montgomery County—Dr. H. H. Pansing, Dayton; Morgan County—Dr. C. E. Northrup, McConnelsville; Morrow County—Dr. R. L. Pierce, Mt. Gilead; Muskingum County—Dr. Beatrice T. Hagen, Zanesville; Ottawa County—Dr. C. R. Wood, Port Clinton; Perry County—Dr. F. J. Crosbie, New Lexington; Pickaway County—Dr. A. D. Blackburn, Circleville; Portage County—Dr. P. L. Harris, Ravenna; Preble County—Dr. J. I. Nisbet, Eaton; Putnam County—Dr. L. M. Piatt, Ottawa; Richland County—Dr. R. C. Rehder, Mansfield; Ross County—Dr. R. E. Bower, Chillicothe; Sandusky County—Dr. F. M. Teeple, Fremont; Scioto County—Dr. G. W. Fishbaugh, Portsmouth; Seneca County—Dr. D. W. Fellers, Tiffin.

Stark County—Dr. Floyd R. Stamp, Canton; Summit County—Dr. R. H. Markwith, Akron; Tuscarawas County—Dr. Chester A. Bennett, New Philadelphia; Union County—Dr. H. G. Southard, Marysville; Van Wert County—Dr. Charles R. Keyser, Van Wert; Warren County—Dr. Edward Blair, Lebanon; Washington County—Dr. Alfred G. Sturgiss, Marietta; Wayne County—Dr. J. J. Sutter, Wooster; Williams County—Dr. H. W. Wertz, Montpelier; Wood County—Dr. H. J. Powell, Bowling Green; Wyandot County—Dr. L. W. Naus, Upper Sandusky.

City Health Commissioners—Dr. M. D. Ailes, Akron; Dr. G. O. Rowland, Alliance; Dr. R. P. Bogniard, Ashland; Dr. H. A. Finefrock, Barberton; Dr. W. J. Shepard, Bellaire; Dr. A. J. McCracken, Bellefontaine; Dr. W. G. Carlisle, Bucyrus; Carl M. Osbe, Cambridge; Dr. Edward J. Reilly, Campbell; Dr. F. M. Sayre, Canton; Dr. F. K. Harder, Cincinnati; L. E. Miller, Circleville; Dr. Harold J. Knapp, Cleveland; Dr. Robert Lockhart, Cleveland Heights; Dr. N. C. Dysart, Columbus; Dr. J. D. Lower, Coshocton; Dr. H. H. Williams, Dayton; G. O. Higley, Delaware; J. D. Craig, Dover; Dr. G. W. Stober, East Cleveland.

Dr. F. R. Harrison, East Liverpool; John C. Todd, East Palestine; Dr. G. E. French, Elyria; Martha Laffey, R. N., Findlay; H. A. DeVore, Fostoria; Dr. H. S. Allen, Ironton; Harry Johnson, Jackson; J. B. Holm, Kent; Mrs. Katherine Winget, R. N., Kenton; Dr. Wallace J. Benner, Lakewood; Dr. C. B. Snider, Lancaster; Dr. J. B. Poling, Lima; Dr. H. M. Boocks, Logan; Dr. Valloyd Adair, Lorain; Dr. J. B. McClure, Marietta; Dr. M. M. Weinbaum, Marion; Dr. John Johns, Martins Ferry; Dwight L. Fisher, Massillon; Dr. G. D. Lummis, Middletown; A. M. Reese, Mingo Junction; Dr. R. H. Hoecker, Mt. Vernon; Dr. W. H. Hyde, Nelsonville; Dr. G. D. Blume, New Boston.

Dr. J. Blickensderfer, New Philadelphia; Dr. J. F. Miller, Newark; Dr. W. W. Lawrence, Norwalk; Dr. H. W. Lautenschlager, Oakwood; Mrs. Clara C. Wilder, R. N., Painesville; F. R. Buechner, Piqua; Dr. O. D. Tatje, Portsmouth; Dr. R. T. Holzbach, Salem; Dr. O. M. Craven, Springfield; Julius A. Pizzoferrato, Steubenville; Dr. J. A. Gosling, Tiffin; Dr. M. C. Hanson, Toledo; Dr. H. D. McCulloch, Toronto; Dr. C. A. Morgan, Van Wert; Dr. J. V. Rice, Wellsville; Dr. A. D. DeHaven, Xenia.

Dr. Wilzbach Is Named Health Commissioner of Cincinnati

Dr. Carl A. Wilzbach, Cincinnati, member of the Committee on Education and chairman of the Sub-Committee on Public Health Education of the Ohio State Medical Association, has been named health commissioner of Cincinnati, effective December 1.



Dr. Wilzbach

A graduate of the University of Cincinnati College of Medicine in 1922, Dr. Wilzbach served his internship at Deaconess Hospital, Cincinnati. For more than 10 years he was director of health and physical education at the Central Y. M. C. A., and from 1924 to 1927 was executive secretary of that organization.

Since 1929 Dr. Wilzbach has been in charge of the Cancer Control Clinic of the Cincinnati Public Health Federation and more recently has been executive secretary of the Cincinnati Social Hygiene Society.

An active member of the Cincinnati Academy of Medicine, Dr. Wilzbach is chairman of the Academy's Committee on Public Relations. He is a fellow of the American Medical Association and the American Public Health Association, and a former president of the University of Cincinnati College of Medicine Alumni Association.

Cincinnati has been without a health commissioner since the death of Dr. William H. Peters five years ago, when Dr. Owen Fisk was named acting health commissioner. Two years later, Dr. F. K. Harder succeeded Dr. Fisk, who retired because of ill health. Dr. Harder will be retained as assistant health commissioner.

Since the establishment of the National Institute of Health, major research division of the United States Public Health Service, in 1887, it has grown from a director and two attendants in a single Marine Hospital room at Staten Island, to a director plus 728 assistants and 168 active, non-resident consultants housed in six vast buildings in a 60-acre plot near Washington, D. C.

In Our Opinion: Comments on Current Economic and Social Questions and Professional Problems; Suggestions Regarding Organized Activities

Let's Don't Wait On Washington; Why Not Take the Driver's Seat?

Washington observers are having their difficulties trying to prognosticate the future of the $850,000,000 so-called National Health Program being sponsored by the President's Interdepartmental Committee.

One authority states that the proposition will be found close to the top of the Federal Administration's agenda for the next Congress.

Another believes that the next Congress will lean toward the conservative side, making it necessary for the Administration to lay off experiments and reforms, especially proposals that run into money and are not based on proved facts and sound principles.

In our opinion, at least part of the Interdepartmental Committee's program will be dumped into the Congressional hopper. If forced to make a guess, we would predict that the radical propositions of the program will not be submitted or, if submitted, will be allowed to collect dust in the archives of some committee. We may be wrong but you can't be shot for guessing.

Nevertheless, we don't want to be accused of stimulating false hopes in the breast of the medical profession or anyone else. We certainly don't want to give the impression that the battle is over. Far from it.

If it realizes the acuteness of the situation, the profession will sail into the fight with even greater vim and vigor. Every good exponent of the manly art of self-defense knows that the time to fight the hardest is when you have your opponent on the ropes or at least confused. Now is the time for the profession to take the lead and set the pace.

At a recent conference between the special committee representing the House of Delegates of the American Medical Association and members of the Interdepartmental Committee, "tentative agreement in principle, not in methods of application" was reached on some of the recommendations in the National Health Program, according to a report on the conference by Dr. Irvin Abell, president of the A.M.A. There is every indication that further conferences will be held.

The fact that the two groups, possessing opposing points of view on a number of aspects of the recommendations which have been made, are endeavoring to arrive at agreements on part of the proposed program, at least, seems to us to be a good sign.

There are some points in the program which the medical profession has endorsed in principle. It should not be too difficult for the two groups to reach a mutual understanding on these regarding methods of application.

As we see it, now is the psychological time for the medical profession to become the aggressor by offering some of its own solutions for recognized problems. States and local communities need not wait for the outcome at Washington. In fact, if constructive work is done locally and problems are attacked from that angle, the pressure at Washington will become less and less.

It seems to us as if the medical profession should follow the advice found in the old football adage, "the best defense is a good offense". The profession should make a strenuous effort to meet local medical and health problems. Nationally, it should take the lead in sponsoring proposals which do not violate fundamental policies and principles and which lend themselves to practical operation.

As one columnist aptly put it, the results of the recent election should not be misinterpreted as indicating the public has gone reactionary with respect to constructive progress but indicate that the public is fed up with squandering and so-called reforms which violate democratic principles.

Would you like to appear on the program of the 1939 Annual Meeting of the Ohio State Medical Association, May 3 and 4, at Toledo?

Suggestions for Annual Meeting Program are Now in Order

Have you any recommendations with respect to speakers or subjects?

The Committee on Scientific Work and the officers of the various scientific sections will welcome your suggestions. Obviously, only a limited number can be placed on the program but the best possible talent is being sought. Given a good list of speakers and subjects, the committee and section officers can build a program even better than those of past meetings.

Every possible effort is made to make the Annual Meeting program attractive and appealing to all members of the State Association. The program drafters are not mind-readers. They are willing to be guided by the sentiments

of the members. Preliminary work on the 1939 program is being done at this time. Now is your chance to speak up; make your suggestions for speakers and subjects.

To get perspective, reorientation, a new viewpoint on medicine, it is valuable to get a little off of one's beaten path. A good procedure is to attend conferences, clinics that are removed from one's immediate interest.—Detroit Medical News.

County Society Officers Must Be Hard-Hitters Not Wall Flowers

During the next 30 days, many of the county medical societies will hold their annual election of officers. In our opinion, this is one occasion, above all others, in which every member of every county society should participate.

It seems to us as if events which are taking place should have convinced the medical profession that it needs to be well-organized and united. Good organization can only be accomplished through good leadership.

There was a time when the chief qualifications a man had to possess in order to be eligible for the presidency of his local medical society were: professional standing, a congenial personality and a few gray hairs. Times have changed. Today, the president of a medical society must be an organizer; a leader; a student of the economic, social and legislative problems confronting the profession; a man with wide and varied public contacts; one who is tolerant and receptive to ideas and suggestions, yet a physician who is unwilling to play fast and loose with principles and fundamental policies; a man of broad vision and with a progressive, yet sound, attitude who refuses to be stampeded but is willing to be shown.

Is there a man in your society who can measure up to these qualifications—or the more important of them? If so, elect him president for the ensuing year. You will need leadership of this kind.

Does your county society secretary possess some of these fundamental qualifications and has he been doing his job well? If so, re-elect him. If not, replace him with a man who measures up. The idea that the secretaryship of a county medical society is something to be passed around periodically is, in our opinion, bunk, as well as bad procedure. If you have a good secretary, keep him; help him. Why change horses in the middle of a stream, especially if the critter has the pep and endurance to get to shore and keep on going after he arrives?

Has your legislative committeeman or heads of your other important committees been on the job and doing good work? If so, keep them on the job. If not, give other members a chance to see what they can do.

The individual members of each county medical society are the ones who should decide these questions. As individuals, physicians will get no place in a hurry when it comes to battling social, economic and legislative problems. As a unit under good management, they can cut quite a figure. This has been demonstrated in the past and will be demonstrated in the future.

On the day when your county medical society meets to elect its officers and committeemen for 1939, you should be there and you should have in mind some of the points which we have raised. Medical organization needs hard-hitters in the saddle.

No physician who takes pride in having professional standing and believes there is safety in numbers and concerted action can afford not to be a member of his local and state medical societies. Don't let your membership lapse. Pay your 1939 dues now.

Are You Doing Your Part In This Matter of Public Relations?

Realizing that the medical profession is confronted with a situation that makes all previous emergencies seem trivial, the American Medical Association has stepped up its activities and presents a more militant and progressive front than at any time in its history.

The first step was the constructive and forward-looking program adopted at the special session of the House of Delegates of the A.M.A. last September. Step Number 2 was the selection of a special committee of the House of Delegates to represent the medical profession at conferences with representatives of the Federal Administration on legislative proposals. The third step was the employment of an experienced newspaper man to serve as public relations assistant to Dr. Morris Fishbein. Step Number 4 is the issuance of a weekly clip sheet known as *American Medical Association News*, containing official announcements of the association, abstracts of news appearing in *The Journal of the A.M.A.* and other material on public health and medical questions for the daily press.

Obviously, all of these moves have merit and will serve a useful purpose. Neither have we any fault to find with suggestions that the A.M.A. employ a lay speaker or speakers of national reputation to present the arguments against governmental control of the practice of medicine to the public; that a campaign be carried on through national radio broadcasts; and similar recommendations.

However, in our opinion, what has been done

and what would be accomplished through nationally-known speakers, radio broadcasts, etc., do not fill the bill.

In the final analysis, the job of educating the public regarding the evils of government-controlled medical practice and about other medical and health questions is the job of the individual members of the medical profession. In other words, each physician must become a salesman and an educator.

How? The answer is easy and the job not difficult.

Think what could be accomplished if every physician would take the time and make the effort to talk over these matters with his patients as he sees them in their homes, in the hospital, or in his office. Physicians should endeavor to convince their patients of the soundness and logic of the profession's policies and then get them to take part in the fight. Members of the allied professions, who are just as deeply concerned, although some do not realize it, should be requested to assist.

Imagine what a whale of a public relations campaign could be waged if physicians would make use of the opportunities offered them to get across the viewpoints of the medical profession before public and semi-public gatherings. There is hardly a club or organization of any kind but what has one or more physicians among its membership. They should demand the opportunity to discuss the good and bad of proposed medical and health legislation with their fellow-members. Individual physicians should accept invitations to speak before lay groups and such groups should be encouraged to open their programs to talks by members of the medical profession. How many physicians are doing this? Far too few, we fear.

Of course, it is the function and responsibility of medical organization to provide members with ammunition and to assist in other ways. However, the real job of winning the confidence of the public and its active support must be done by physicians themselves. If they shirk their responsibilities and fail to do what they can as individuals (and there is much they can do), the employment even of magicians, experts in ballyhoo, spellbinders, and the like, will avail them little.

For years the medical profession has failed to take the leadership in molding public opinion. This applies to a degree to every blessed community. The public hasn't warmed up very much to aloof physicians and their viewpoints. Valuable contacts have been overlooked—even avoided. This situation cannot be corrected by those outside the profession. It can be corrected by the medical profession itself through the efforts of individual physicians.

The most important and effective kind of public relations is that which can be carried on daily by individual physicians. If the physicians in a given community are unable to get adequate publicity in the local press, arrange for opportunities to present their views before lay groups, and win the confidence of the people, there is no chance of accomplishing these things through a second-party, regardless of his ability and influence.

Organized activity and the use of competent outside help are useful and necessary factors in any public education campaign but they are of secondary importance. The major role must be played by the members of the medical profession themselves. The outcome will depend pretty largely on how well they do their job.

The headline, "Eight States Get Cheaper Medical Care", which one Ohio daily used on an article regarding various medical service plans, seems to summarize just what is likely to happen—cheaper medical care—if the crack-pot schemes which are being suggested by some reformers ever take root.

Have a Heart and Give Your Entertainment Committee a Break

An issue of *The Bulletin of the Mahoning County Medical Society* contained an open letter to the president and members of the society from Dr. H. E. Patrick, chairman of the Entertainment Committee. Inasmuch as the point Dr. Patrick raises is applicable to most county societies, his letter is quoted in full:

"Our society progresses by virtue of mutual help and participation among and by its members. As a somewhat sad commentary on the above theorem, permit me to recite to you the woes of your entertainment committee in putting on the recent picnic. Then judge for yourself if you are doing all that you might do to lighten the not inconsiderable burden on those groups of your members whom you have entrusted with the management of your affairs.

"Returnable postal cards were put in your hands one week in advance of the day of the picnic, asking you to indicate whether or not you would be present. Our membership is over 200. The response, by postal card, indicating yes or no, was 100.

"Sixty indicated their intention of being present. However, to be on the safe side, your committee obligated itself to the caterer for 75 dinners. When we sat down to dinner, there were present, 72 active members and ten interns. Five men, four of whom had expressed their intention of being present by returning their cards, found it necessary to go to town for their dinner. (Needless to say their money was refunded.) Of the 67 active members who found places at the tables, 24 had not troubled to return their cards.

"Mr. President: This is not alone my protesta-

tion against the lack of cooperation on the part of our members. It comes from every committeeman entrusted with the activities of the society. Dr. Noll can pour such woes into your ears by the hour. I present this data with the hope—is it hoping too much?—that in the future each member will lend his cooperation."

Organized medicine would accomplish nothing were it not for the work of conscientious committeemen. The least the members can do is to give them their cooperation. Dr. Patrick's point is well-taken. If you disagree, you've never worked on a committee.

One observer states that under one European compulsory sickness insurance program, it takes the physician 14 minutes to complete a patient's record. Figure it out, for say 20 patients, and see how much really valuable time is consumed by a physician each day on red tape and paper work.

How Long and How Should Medical Histories Be Retained?

How long should a patient's medical history be retained? This is a question which plagues every physician. To say it is an important one would be stating it mildly. Aside from the legal aspects involved, there is the matter of having records available for more competent treatment for future disabilities.

Sound advice on this question is found in an article by Dr. Walter E. List, superintendent of Jewish Hospital, Cincinnati, published in *Hospitals*, official publication of the American Hospital Association.

Dr. List, after making a comprehensive survey of hospitals throughout the country of methods and policies with respect to records, makes the following recommendations:

1. Keep medical records permanently if adequate storage space is available. Filing cabinets for histories up to 10 years old should be made of metal.

2. If records are destroyed, abstract them on cards before disposing of them.

3. Nurses' notes may be destroyed after a 10-year period but they should be read carefully as often they contain valuable information which should be transferred to permanent records.

4. Photography of records presents an ideal arrangement, particularly so after the statute of limitations has become effective.

Obviously, Dr. List's recommendations are meant primarily for hospitals but they are applicable for the private records of physicians and should be followed.

Back to Fundamentals A Good Slogan for All To Follow

It will be found always that the expert in any line is the one who knows most about, and sticks closest to fundamentals. One of the main differences between a skilled physician and the run-of-mine is that the expert knows the fundamentals of medicine more thoroughly and applies them more diligently.

Do you know that at almost 80 years of age, Paderewski, the pianist, still practices the C scale?

Fundamentals are hard to find and easy to lose sight of in the stress and strain of the distracting influences of practice. It is for this reason that those in charge of our Regional Postgraduate Lectures have asked certain speakers to stress the fundamentals. Although it is no more pleasant for us to review them than it is for the great musician to run his scale, yet each is important if a high degree of skill is to be maintained. It is often more important to recall the old than it is to be thrilled by the new.

In formulating future programs, the Committee on Education will strive to have the new presented and to have the cut-and-dried minimized. Nevertheless, we feel confident that the committee will not lose sight of the thought expressed above. Think it over. We feel that you will have to agree with us.

There is more or less larceny in all the human race, and this problem of medicine for the masses would be less difficult if those who can pay were prevented from appealing to public sympathy at the doctor's expense by mingling with the truly destitute.—Westbrook Pegler.

More Reasons Why Strong Medical Organization Is Needed

At the recent General Election, the forces of scientific medicine won notable victories in California and Colorado.

In California an initiative humane pound law, so-called, proposing to cripple scientific research by hampering animal experimentation, was decisively defeated. In Colorado an initiative measure proposed by a group of chiropractors, to debase the quality of medical care in the state by repealing the basic science act and by destroying other safeguards that have been erected to assure adequate and scientific medical service, was met by an avalanche of negative votes, running as high as ten to one in some counties.

Ohio physicians may be surprised to know that last Spring a group of chiropractors—most

of them unlicensed—launched a movement in this state for a state-wide referendum to amend the Ohio Constitution in a way similar to the provisions of the Colorado measure. Petitions were drawn up but were not circulated so, of course, the proposal was not submitted for vote of the electorate.

Those who may seem skeptical of two things—the necessity and value of medical organization, and the need for adequate financial resources for the same—should carefully analyze the situations which confronted California and Colorado.

Ask the physicians of those states if they believe efficient medical organization is essential?

Ask the people of those states whether or not the medical profession, if properly organized, can be an influential and powerful factor in molding public opinion?

Ask yourself who would have borne the brunt of the battle had the proposed amendment referred to above been submitted to the people of Ohio last November 8?

Also, ask yourself if the very nominal amount of money which you pay annually for the support of your county and state medical societies isn't the best gilt-edged investment you ever made?

Medical care should be locally rather than nationally administered. The effective and economical administration of medical aid for the masses by huge federal agencies is well nigh impossible.—S. S. Goldwater, M.D., Commissioner of Hospitals, New York City.

We've Just Begun To Fight; Now Is Not the Time for a Relapse

After the first of the year, many new faces will be seen in various public offices in Ohio and in the Ohio delegation to the United States Congress as a result of the General Election on November 8.

The physicians of Ohio, as good citizens, took an active part in the pre-election campaign—probably a more active part than ever before. In general, such activities were non-partisan in character. That is the only sound and logical attitude which should be taken by groups non-political in make-up and purposes.

Now that the election is over, the profession must guard against a relapse into an attitude of "let George do it". Actually, the fight has just started.

Those elected or re-elected to administrative and legislative offices will need and should have the help and guidance of members of the medical profession on matters relating to public health and the practice of medicine. If they are honest with themselves, they will realize that physicians know more about these questions than they do.

Nevertheless, the medical profession must not sit back and expect public officials to take the initiative in asking for assistance. Some will, some will not. It is the duty of medical societies and individual physicians to take the first steps. Now is the time for real follow-up work.

To be specific and addressing the individual members of the State Association: Have you seen and congratulated the successful candidates for public offices residing in your city, county, senatorial or congressional district? Have you told them that you and your colleagues stand ready to help them when medical and heath questions arise? Have you encouraged them to come to the medical profession with their problems? Have you and other physicians in your community made the contacts which will make it easy for you to approach office-holders in the future and present the medical viewpoint on various questions when and if they arise?

If you haven't done this comparatively easy job or made plans to do it, you have shirked your duty.

If there has been one practical subject more utterly neglected in the medical schools of this country than the business side of medicine, I cannot point to it. To my mind, this neglect of it is the basic source of most of the financial difficulties of physicians today.—Henry Pleasants, Jr., M.D., West Chester, Pa.

Everyone Loveth the Cheerful Giver Except the Co-op Promoters

We always have felt that those who have made Community Chest work their career and those philanthropic citizens who have supported such movements with their money and energies have been sincere, public-spirited persons, deserving of the commendation of their fellow-citizens.

We always have felt that those in Community Chest work and sponsors of such activities have been deeply appreciative of the philanthropy which has characterized the medical profession throughout the centuries and the institutions which they have founded. They, being much closer to the firing line than others, have been in a position to have definite and first-hand knowledge of the services which have been rendered by the physicians of all lands to relieve suffering and misery, without remuneration or expectation of receiving compensation in many instances. What group has so continuously given away the fruits of its talents for the benefit of mankind? What group has received or asked less recognition for its charitable spirit and gratuitous services? The answer is obvious.

Now we find that Community Chest workers, as well as the medical profession and the hospitals, are being put on the spot by proponents

of the Group Health Association scheme at Washington, D. C., about which so much has been heard during recent months.

A campaign of coercion has been launched at the instigation of sponsors and supporters of the medical service plan inaugurated in the District of Columbia with powerful governmental backing. The behind-the-scenes manipulations are revealed in the following release, dated November 15, from the Bureau of Cooperative Medicine, New York City, god-father of the Group Health Association at Washington, D. C.:

"Public disapproval of the Washington hospitals' action to bar staff and patient members of Group Health Associations from use of their facilities, has recently found a new mode of expression in the formation of a Citizens Committee for Medical Freedom.

"The present objective of this group is to supply and direct a feasible program for attacking the hospitals' policy through the medium of the Community Chest.

"In providing hospital facilities for the indigent sick, the Chest purchases hospital service on a very large scale. Hence, it makes a significant contribution to hospital revenue.

"Since funds disbursed by the Chest are raised by public subscription, contributors who sympathize with G. H. A. feel that the Chest should use its strategic consumer position to protest a policy of hospital management which is obnoxious to many of its patrons.

"Reluctance of Chest officials to take such action has placed contributors in an awkward position, because withdrawing their support from the Chest would jeopardize the welfare of the sick poor.

"Commenting on this fact last March, Mr. W. C. Kirkpatrick, President of the G.H.A., said: 'Group Health members committed to a program with the same social aims as the Chest, should take no action that might imperil the Chest's progress.'

"The Citizens Committee for Medical Freedom emphaticaly states that it is not asking the public to withhold contributions from the Chest, nor does it recommend earmarking contributions to exclude hospitals.

"Its program is to have Chest subscribers affix a stamp to their pledge, stating that it will become effective when the Chest ceases to patronize hospitals discriminating against Group Health Association".

None can predict whether this attack, in which common decency, ethics, and appreciation for services well-performed have been lost sight of, will have any effect. We hope that the Community Chest workers of the District of Columbia will stand pat and that contributors will turn away in disgust.

We greatly fear that those tears which the co-op promoters at Washington have been shedding over the plight of the low-income groups and the treatment they have been receiving at the hands of the "medical trust" have been nothing more nor less than crocodile tears. Verily, now their idea seems to be to alienate the one group which has stood by the needy sick and the fellow pursued by bad luck through thick and thin, and usually has never asked even a thin dime for its efforts—the medical profession; and to destroy private philanthrophy for selfish reasons.

If this be treason, Mr. Arnold, bring on your bloodhounds! We'd rather be shot, than reformed to death.

Continuing a record of many years standing, Dr. Isa Teed Cramton, secretary of the Geauga County Medical Society, rates the No. 1 position in forwarding 1939 annual dues to the State Association. Dues for nine of the society's 10 members were received at the State Headquarters Office, November 8.

Refresher and Clinical Program In Pediatrics Scheduled for Dec. 7

Under the auspices of the State Department of Health, a refresher course in pediatrics, and clinical demonstrations will be given by members of the staff of the Department of Pediatrics, University of Cincinnati College of Medicine, at the Children's Hospital and Research Building, Cincinnati, Wednesday, December 7. The program follows:

10:00 A.M. to 12:30 P.M. Lectures and demonstrations.

1. "Endocrine and Related Disorders in Children",—Dr. Joseph Warkany.
2. "Practical Considerations of Vitamin Deficiencies in Infancy",—Dr. Waldo E. Nelson.
3. "Anemias of Childhood",—Dr. C. R. Rittershofer.
4. "Clinical Methods of Examination of Infants and Children",—Dr. F. E. Stevenson.
5. "Congenital Syphilis",—Dr. R. A. Lyon.

12:45 P.M. Luncheon at Children's Hospital. Speaker—Dr. A. Graeme Mitchell.

2:00 P.M. Round-Table Discussions.

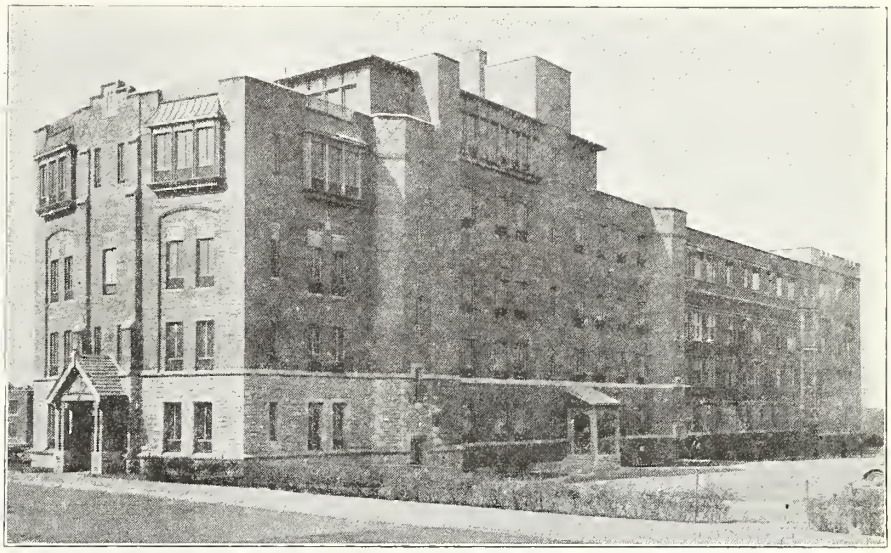
1. Case Histories Presented by Physicians Attending the Refresher Course.
2. "Some Patients of the Children's Hospital". Discussion conducted by Drs. Nelson, Warkany, Rittershofer and Lyon.

Physicians interested in attending the course should notify Dr. Robert A. Lyon, care Department of Pediatrics, Cincinnati General Hospital, as only a limited number can be accommodated. If sufficient interest is manifested, the course will be repeated later.

NEW ISOLATION UNIT AND OUT-PATIENT DEPARTMENT AT THE STARLING LOVING HOSPITAL DEDICATED ON NOVEMBER 19

FORMAL opening of the new isolation unit and out-patient department of Starling Loving Hospital, Ohio State University, occurred Saturday morning, November 19.

Brief ceremonies were combined at that time with the annual homecoming clinics, on the day of the Michigan-Ohio State football game. All Ohio State medical alumni were invited.



UNIVERSITY HOSPITAL'S NEW OUT-PATIENT WING

The new $250,000 building, made possible by a P. W. A. grant, is now being used as an out-patient dispensary. These activities formerly were carried on in downtown Columbus, in a building adjoining St. Francis Hospital.

Most of the morning was given over to an inspection of the new building and to observation of work in the clinics. A short program was then given in the isolation unit on the fifth floor, with H. S. Atkinson, chairman of Ohio State's board of trustees, presiding.

Dr. Carl Watson, Ohio W.P.A. administrator, and J. L. Kelly, Columbus area supervisor, presented the building to the university. Dr. William McPherson, acting president, accepted on behalf of the university, and Dr. J. H. J. Upham, dean, on behalf of the College of Medicine.

The new building offers many advantages over the old structure which has been in use for 30 years or more, having been originally a part of the facilities for Starling Medical College.

With the out-patient department, the College of Medicine, and the hospital proper in close proximity, clinical service now extends over the whole day. New services to patients also are made possible.

The ground floor of the new building is taken up largely with storerooms and laboratories. On the first floor proper are facilities for admissions, pharmacy, record room, and a suite accommodating a number of clinics—pediatric, pre-natal, medical, and others. In an annex is the urology clinic.

The main medical section is located in the front part of the second floor, with clinical facilities for hematology, allergy, heart, chest, endocrine, skin, gynecology, venereal, and some surgery. Here also are the fluoroscope rooms.

Going on to the third floor, the visitor finds the eye, ear, nose and throat clinics; clinics in arthritis, gall-bladder, neuro-surgery, varicose vein and leg ulcer, and provision also for surgical specialties.

The fourth and fifth floors are devoted to contagious disease cases, with both ward and private rooms. Here the Drinker respirator has been placed. A separate elevator service has been provided for the isolation unit. The isolation hospital has been located in an old wooden barracks building on the campus, erected originally as a part of the war-time construction to accommodate the Student Army Training Corps.

Join Pathology Society

At a meeting of The Ohio Society of Clinical and Laboratory Diagnosis, Saturday, October 15, at the Department of Pathology Ohio State University College of Medicine, Columbus, the following physicians were admitted to active membership: Dr. W. M. German and Dr. P. Wasserman, Cincinnati; Dr. G. B. Kramer and Dr. W. D. Collier, Youngstown; Dr. M. R. Baker, Akron, and Dr. D. H. Fuchs, Canton. Proceedings of the meeting are published in this issue of *The Journal*, pages 1365 and 1366.

Do You Know - - -

State relief grants for Cuyahoga and Guernsey counties for November were held up because of the failure of relief officials in those counties to keep administrative costs within the 12 per cent maximum set by the relief law.

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Speakers at the recent annual postgraduate course of the Lima and Allen County Academy of Medicine were Dr. Carl E. Badgley, professor of orthopedic surgery, University of Michigan Medical School; and Dr. Charles A. Doan, professor of medicine, Ohio State University College of Medicine.

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Dr. M. Tischer Hoerner, Dayton, was awarded the first prize of $500 and a life membership in the American College of Surgeons, for a treatise submitted at the annual meeting of the college held in New York recently.

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The National President of the Fraternal Order of Eagles is Dr. Fred C. Dilley, Brazil, Indiana, a member of the Indiana State Medical Association.

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The Nazi Commissioner of Medical Journalism has ruled that German medical journals no longer may accept articles by Jewish physicians, and German physicians can subscribe to foreign journals only if they are published by Aryan publishers and edited by Aryan physicians.

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In the last 50 years the number of public health nurses in the United States has increased from a scattered few to a total number of over 23,000.

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Dr. Carl J. Wiggers, professor of physiology, Western Reserve University School of Medicine, recently returned from a lecture trip in South America. Among the groups he addressed was the VIth National Congress of Medicine in Buenos Aires.

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Proposed bond issues for the purpose of constructing hospitals in Wayne and Wyandot counties were defeated at the recent election.

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The Montgomery County Medical Society and Dayton Y.M.C.A. recently sponsored a "Hall of Health" at Dayton. Included among the exhibits was the S. H. Camp & Company "Transparent Woman".

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Dr. John C. Darby, Cleveland, was recently honored with a dinner marking his retirement from the 368th Officers Reserve Corps, U. S. Army, of which he had been commander since 1929.

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During the ten-year period, 1928 to 1937 inclusive, 1,904,366 Ohio employees filed claims with the State Industrial Commission.

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Dr. H. M. Turk, a member of the staff of the Lima State Hospital for the past six years, was recently appointed superintendent of the institution.

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Dr. J. C. Tritch, Findlay, one of the eight living charter members of Findlay Lodge No. 75, B.P.O.E., and the first exalted ruler of the Lodge, has been practicing medicine in Findlay for 61 years.

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Dr. Warren F. Draper, executive officer of the United States Public Health Service, Washington, D. C., and Dr. Harry G. Sloan, Cleveland, discussed "Socialized Medicine" at a recent Town Hall meeting of the Cleveland City Club.

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Dr. Frank M. Oldt, a member of the staff of the State Department of Health from 1925 to 1929, is superintendent of a hospital in Canton, China.

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Typhoid deaths in American cities hit a new low of 0.76 per 100,000 population in 1937, compared with 20.54 in 1910.

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The Ohio Supreme Court recently ordered the Buhl Optical Company, Pittsburgh, to show cause why it should not be held in contempt for failure to obey an order of June 3, 1936, to desist from engaging directly or indirectly in the practice of optometry in Ohio.

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Henry A. Hoffman, widely known Ohio "faith healer", died at Rosewood, October 7.

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Dr. Lucy Stone Hertzog, Chardon, president of the Geauga County Medical Society, and active proponent of the interests of the medical profession, was guest speaker at the recent annual session of the Homeopathic Medical Society of Delaware, at Wilmington, Del. Her subject was "Socialized Medicine from Many Angles".

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The Association of American Medical Colleges will hold its 1939 meeting in Cincinnati, October 23-25.

Western Reserve Chosen as Center For Training in Cancer Therapy

The School of Medicine, Western Reserve University, has been accepted by the National Cancer Institute as one of the centers for the training of physicians in the diagnosis and treatment of cancer. All the appointments are filled at the moment, but as vacancies may arise, those who are interested should apply promptly to the Surgeon General, United States Public Health Service.

Appointments at this school are for two years. The work includes eight months of pathology, eight months of radiology, and eight months of surgery, under the general direction of Doctors Freedlander, Pomeroy and Lazzari of the Tumor Clinic at City Hospital.

Applicants must have had at least three years of hospital training, one of which may have been a rotating internship, but two at least must have been surgical. Not more than one trainee can be accepted at present, but this may gradually be increased to three.

Trainees will be paid by the National Cancer Institute on a per diem basis out of which they will be expected to pay all of their necessary expenses, including tuition, if any is charged by the institution which accepts them for training. Stipends for training will range from a per diem allowance of five to ten dollars, depending on training, experience and other considerations.

Further information and application blanks may be obtained upon written request to the Surgeon General, United States Public Health Service; to the Director, National Institute of Health, Washington, D. C., or from Dr. John H. Lazzari, Secretary of the Cancer Training at Western Reserve University, Republic Building, Cleveland, Ohio.

Fifth District Meeting

Approximately 75 Northeastern Ohio physicians attended a meeting of the Fifth District of the Ohio State Medical Association at the Allen Memorial Medical Library, Cleveland, Friday, October 21. Speakers included: Dr. A. D. Nichol, Dr. A. Strauss, Dr. E. E. Beard, Dr. Gerald S. Shibley, Dr. John A. Toomey, Dr. Curtis F. Garvin, Dr. R. C. McKay, Dr. E. E. Woldman, Dr. T. E. Jones and Dr. Hubert C. King, Cleveland; Dr. Clifford J. Baborka, Chicago; Dr. Barney J. Hein, Toledo, President, and Charles S. Nelson, Columbus, Executive Secretary, Ohio State Medical Association. The program was arranged by Dr. Edgar P. McNamee, Cleveland, Councilor for the Tenth District, and H. Van Y. Caldwell, Executive Secretary of the Academy of Medicine of Cleveland.

Christmas Seal Sale Under Way In Ohio; Funds Used to Fight Tuberculosis

For the thirty-second consecutive year, Christmas Seals are being sold throughout the United States between Thanksgiving and Christmas for the purpose of providing funds for the educational campaign against tuberculosis. In Ohio there are over 100 local organizations in the various counties which conduct the Christmas Seal sale, and which assist in financing local anti-tuberculosis campaigns. The local organizations are affiliated with the Ohio Public Health Association (formerly the Ohio Society for the Prevention of Tuberculosis), which in turn is affiliated with the National Tuberculosis Association.



Each local organization retains 80 per cent of the receipts from the sale of Christmas Seals with which to carry on the community program. The State Association receives 15 per cent to finance state activities and 5 per cent goes to the National Tuberculosis Association. Receipts from seal sales in Ohio last year totaled $260,090.01.

Although the death rate from tuberculosis has shown a remarkable decrease in the United States in the last 30 years, it still ranks first in the cause of death in the important years of 15 to 45, upon which age groups future efforts will be largely concentrated.

The 1938 Christmas Seal was designed by Lloyd Coe, New York City, a student of the world-famous painter, George Pearse Ennis. Mr. Coe teaches color theory and applied art at the Metropolitan Art School in New York.

ACTIVITIES OF COUNTY SOCIETIES

First District

(COUNCILOR: L. H. SCHRIVER, M.D., CINCINNATI)

HAMILTON

The Academy of Medicine of Cincinnati presented the following programs during November:

November 1—"The Management of Acute Bowel Obstruction," by Dr. Owen H. Wangensteen, chief, department of surgery, University of Minnesota Medical School, Minneapolis.

November 8—"Medical Aspects of Chronic Lung Infections", by Dr. John H. Skavlem; discussant, Dr. M. A. Blankenhorn. "Bronchoscopic Examination in Lung Diseases", by Dr. Robert E. Howard; discussant, Dr. Samuel Iglauer. "The Surgical Aspects of the Diseases of the Lung", by Dr. B. N. Carter.

November 15—"Anesthesiology", by Dr. Ralph M. Waters, professor of anesthesia, University of Wisconsin Medical School, Madison, Wisconsin. The meeting was held under the auspices of the Cincinnati Society of Anesthetists.

November 22—"Hyper-Activity in Children and its Relation to Certain Behavior Disorders", by A. T. Childers, with discussion by Dr. Emerson A. North and Dr. Harold F. Downing. "Status of Immunization Procedures in Infancy and Childhood", by Dr. J. Victor Greenebaum and Dr. Theodore K. Selkirk, with discussion by Dr. Robert A. Lyon.

November 29—Hospital Night. Case reports arranged and presented by the staff of Children's Hospital. "Treatment of Sub-Acute Pancreatitis with Cholecystostomy", by Dr. Paul W. Sutton; "Wilms' Tumor", by Dr. Henry B. Freiberg; "Nephrosis", by Dr. Thomas S. Weaver; "Pneumococcic Meningitis", by Dr. Barbara Hewell. "Chronic Myeloid Leukemia", by Dr. Clare R. Rittershofer; "Erythroblastosis Foetalis", by Dr. Harold F. Downing; "An Interesting Correction of a Leg Deformity", by Dr. Joseph A. Freiberg. —Bulletin.

HIGHLAND

Dr. Verne A. Dodd, Columbus, professor of surgery, Ohio State University College of Medicine, spoke on "The Acute Abdomen", at a meeting of the Highland County Medical Society, Wednesday, October 26, at the Greenfield Country Club.

Dr. L. H. Schriver, Cincinnati, Councilor for the First District, discussed some of the economic problems confronting the medical profession at a meeting of the society, at Hillsboro, Wednesday, October 5.—News clipping.

Second District

(COUNCILOR: D. W. HOGUE, M.D., SPRINGFIELD)

GREENE

Dr. William B. Bean of the staff of the University of Cincinnati College of Medicine, presented an interesting lecture on "Pellagra", at a meeting of the Greene County Medical Society, at Xenia, Thursday, November 3. He discussed the history of this disease, its symptoms, diagnosis and present method of treatment. Following a discussion of the attitude toward the medical profession of various candidates in the November 8 election, members were asked to use their influence in behalf of those who were favorable.—Donald F. Kyle, M.D., secretary.

MIAMI

At a meeting of the Miami County Medical Society, Friday afternoon, November 4, at the Stouder Hospital, Troy, a motion picture, "Human Sterility", was shown by courtesy of the Winthrop Chemical Company. Dr. G. R. Upton, Piqua, spoke on "The Endocrinology of Obstetrics and Gynecology". Dr. Russell W. Gardner, Troy, was the discussant.—G. A. Woodhouse, M.D., secretary.

MONTGOMERY

Dr. William Bates, Philadelphia, Pa., spoke on "Differentiation Between Visceral and Parietal Pain", at a meeting of the Montgomery County Medical Society in the auditorium of the Fidelity Medical Building, Dayton, Friday evening, November 4. At a dinner meeting of the society Friday evening, November 18, at the Dayton State Hospital, a clinic was presented by members of the hospital staff, with demonstrations of metrazol and insulin therapy.—Mildred E. Jeffrey, executive secretary.

Third District

(COUNCIOR: O. P. KLOTZ, M.D., FINDLAY)

HARDIN

Members of the Hardin County Medical Society adopted a plan for the medical care of Farm Security Administration clients at a meeting of the society, Thursday night, October 27, in Kenton. Dr. John LoCricchio, Lima, gave a talk on his experiences while practicing in Brazil. —News clipping.

MARION

The Marion Academy of Medicine met at the Marion City Hospital, Tuesday, October 11. Dr. George I. Nelson, Columbus, spoke on "Treatment of Congestive Heart Failure". At a meet-

ing of the society, November 1, Dr. Bruce K. Wiseman, Columbus, discussed "Purpuera Hemorrhagia".—R. G. McMurray, M.D., secretary.

Fourth District

(COUNCILOR: E. J. McCORMICK, M.D., TOLEDO)

LUCAS

The Toledo Academy of Medicine presented the following programs during November:

November 4—General Meeting. "Endometriosis", by Dr. A. E. Kanter, clinical professor of obstetrics and gynecology, Rush Medical College, Chicago.

November 11—Section of Pathology, Experimental Medicine and Bacteriology. Annual Joint Meeting with the Toledo Dental Society. "Accessory Nasal Sinusitis in the General Practice of Medicine", by Dr. A. C. Furstenberg, University of Michigan Medical School, Ann Arbor.

November 18—Medical Section. "Diabetes", by Dr. Henry J. John, Cleveland.

November 25—Surgical Section. "The Time Lost in the Treatment of Cervical Cancer", by Dr. O. E. Todd; "The Early Diagnosis of Brain Tumors", by Dr. Max T. Schnitker.—Bulletin.

SANDUSKY

At a meeting of the Sandusky County Medical Society, Thursday, October 27, Dr. C. I. Kuntz reported on the legislative conference of the Ohio State Medical Association held at Columbus, October 2. A general discussion of current medical problems followed.—News clipping.

WOOD

Dr. Lawrence Clark, Toledo, spoke on "Pediatric Problems in General Practice", at a meeting of the Wood County Medical Society, Thursday, November 17, at the Woman's Club, Bowling Green.—R. N. Whitehead, M.D., secretary.

Fifth District

(COUNCILOR: E. P. McNAMEE, M.D., CLEVELAND)

ASHTABULA

Dr. Walter K. Stewart, Youngstown, chairman of the Sub-Committee on Poor Relief of the Ohio State Medical Association, spoke on "Socialized Medicine", at a meeting of the Ashtabula County Medical Society, Tuesday night, October 11, at Ashtabula.—News clipping.

At a meeting of the society, Tuesday, November 15, Dr. Curtis F. Garvin, Cleveland, spoke on "Problems in the Use of Sulfanilamide". Dr. Edgar P. McNamee. Fifth District Councilor, visited the society and commented on the recent election, anticipated legislation, socialized medicine and the campaign of the Women's Field Army for the Control of Cancer. Approximately 25 physicians attended the meeting.

CUYAHOGA

The Academy of Medicine of Cleveland presented the following programs during November:

November 4—Clinical and Pathological Section. "Cesarean Section for Pulmonary Edema with Recovery", by Dr. J. M. Rossen; "Granuloma of Stomach, Obstruction—Resection; Granuloma of Terminal Ileum, Obstruction—Resection", by Dr. F. T. Gallagher; "Treatment of Chronic Ulcerative Colitis with Sulfanilamide", by Dr. E. J. Stefanic; "Post-Operative Pulmonary Embolism", by Dr. J. R. Ripton; "Ruptured Ectopic with Massive Internal Hemorrhage Following Use of Abortifacients, with Recovery", by Dr. W. F. Creadon; "Fracture Dislocation, Shoulder", by Dr. G. I. Bauman.

November 7—Special Meeting, Obstetrical and Gynecological Section, with obstetricians and gynecologists from Buffalo and Pittsburgh as guests. Morning session, operative clinics and motion pictures at MacDonald House. Afternoon session, demonstrations and discussions at St. Luke's Hospital. Dinner session at Nela Park, followed by an address on "X-ray Pelvimetry", by Dr. W. E. Caldwell, New York City.

November 9—Practice of Medicine Section. "The Management and Treatment of Acute Rheumatic Fever with Cardiac Involvement", by Dr. Harold Feil; "A Discussion of Acute Nephritis", by Dr. C. D. Christie.

November 11—Joint Meeting of the Experimental Medicine Section and Cleveland Society for Experimental Biology and Medicine. "Developing Dental Patterns as a Measure of Child Health", by B. Holly Broadbent, D.D.S.; "Failure of Vitamin C to Influence Albuminuria and Hematuria", by Dr. Max Miller, Miss S. M. Johnson and Dr. J. M. Hayman, Jr.; "The Specificity of Keratins", by L. Pillemer, Ph.D., and E. E. Ecker, Ph.D.; "Experiences with the Hamilton Parathyroid Hormone Test in Monkeys", by Dr. Henry J. Gerstenberger, Edna E. Chapman, M.A., Catharine S. Rose, M.S., and Fred Beal; "The Etiology of Vasomotor Nutritional Changes Following Peripheral Nerve Section", by Dr. L. N. Atlas.

November 16—The Cleveland Fracture Committee of the American College of Surgeons, the Frank E. Bunts Institute and the Industrial and Orthopedic Section of the Academy held a special meeting on "Fractures", with a fracture clinic at St. Luke's Hospital in the afternoon, and an address in the evening, the Bunts Lecture, by Dr. J. Albert Key, clinical professor of orthopedic surgery, Washington University School of Medicine, St. Louis, on "Cervical and Trochanteric Fractures of the Femur".—Bulletin.

GEAUGA

At a meeting of the Geauga County Medical Society at Burton, November 2, it was decided to

accept the Logan County Medical Plan for the medical care of Farm Security Clients in Geauga County. Various legislative and public relations problems were also discussed.—Isa Teed Cramton, M.D., secretary.

LORAIN

Dr. Thomas E. Jones, Cleveland, spoke on "The Diagnosis and Treatment of Carcinoma of the Colon and Rectum", at a meeting of the Lorain County Medical Society, Tuesday evening, November 8, at Hotel Antlers, Lorain.—L. H. Trufant, M.D., secretary.

MEDINA

Dr. F. A. Spittler, Cleveland, gave an address on "Dehydration Method in the Treatment of Head Injuries", at a meeting of the Medina County Medical Society, Thursday, November 17, at Medina. Dr. Edgar P. McNamee, Cleveland, Councilor for the Fifth District, discussed the program of the Women's Field Army for the Control of Cancer. The meeting was attended by about 15 members.

Sixth District

(COUNCILOR: WM. M. SKIPP, M.D., YOUNGSTOWN)

MAHONING

"General Use of the Chemical Laboratory in the Diagnosis and Practice of Medicine", was the subject discussed by Dr. John H. Talbott, assistant physician, Massachusetts General Hospital, Boston, Mass., at a meeting of the Mahoning County Medical Society, Tuesday evening, November 15, at the Youngstown Club.—Bulletin.

PORTAGE

At a meeting of the Portage County Medical Society, Thursday evening, November 3, at the home of Dr. S. U. Sivon, Ravenna, a talk on "The Diagnosis of Lung Conditions by X-ray", was made by Dr. Paul C. Langan, Akron. The work planned by the Health Department was explained by Dr. P. H. Harris, Portage County health commissioner.—E. J. Widdecombe, M.D., secretary.

STARK

Dr. John A. Toomey, Cleveland, spoke on "Specific Prevention and Treatment of the Acute Exanthemata", at a meeting of the Stark County Medical Society, Thursday evening, November 10, at the Elk's Club, Canton.—Clair B. King, M.D., secretary.

Seventh District

(COUNCILOR: C. W. KIRKLAND, M.D., BELLAIRE)

BELMONT

Dr. Walter K. Stewart, Youngstown, discussed local and state relief problems, at a meeting of the Belmont County Medical Society, Thursday afternoon, October 13, at Martins Ferry.—News clipping.

Eighth District

(COUNCILOR: E. R. BRUSH, M.D., ZANESVILLE)

ATHENS

Dr. Louis Kroger, Parkersburg, W. Va., was the guest speaker at a meeting of the Athens County Medical Society, Tuesday, October 11, at Athens. Dr. Clarence N. Sanders, Millfield, discussed "Rocky Mountain Fever", at a meeting of the society, Tuesday, November 8, at Nelsonville. —News clipping.

MORGAN

Members of the Morgan County Medical Society were guests of the County Bar Association at a dinner meeting, Tuesday evening, October 11, at the Kennebec Hotel, McConnelsville. Speakers were: Dr. Roy J. Secrest and Dr. Walter E. Masters, Columbus, and Robert H. Edwards of the Legal Department of the State Industrial Commission.—News clipping.

PERRY

At a dinner meeting of the Perry County Medical Society, Thursday, October 13, at the Park Hotel, New Lexington, Dr. Carl A. Hyer, Columbus, spoke on "Deficiency Diseases".—News clipping.

Ninth District

(COUNCILOR: I. P. SEILER, M.D., PIKETON)

HOCKING

Dr. J. H. Hyman, Hollywood, California, a former resident of Logan, discussed "Socialized Medicine", at a meeting of the Hocking County Medical Society, at the White House, Logan, Thursday noon, October 13. A general discussion of the problem followed.—News clipping.

SCIOTO

"New Things in Thoracic Surgery", was the subject presented by Dr. George M. Curtis, Columbus, at a meeting of the Hempstead Academy of Medicine of Scioto County, Monday evening, November 14, at Portsmouth General Hospital.—W. M. Singleton, M.D., secretary.

Tenth District

(COUNCILOR: C. C. SHERBURNE, M.D., COLUMBUS)

FRANKLIN

The Columbus Academy of Medicine presented the following programs during November:

November 7—"The Present Status of Surgery in the Treatment of Pulmonary Tuberculosis", by Dr. Cameron Haight, assistant professor of surgery, University of Michigan Medical School, Ann Arbor, Mich.

November 21—"Diagnosis of the Causes of

Heart Failure", by Dr. Louis Hamman, associate professor of medicine, Johns Hopkins School of Medicine, Baltimore, Md.

November 28—Joint Meeting of the Section in General Medicine with the Columbus Psychiatric Society at McMillen Sanitarium. Program by Dr. R. A. Kidd, Sr., Dr. E. J. Emerick, and Dr. Roy J. Secrest.—Bulletin.

MORROW

Dr. Wayne Brehm gave an excellent address on "Modern Obstetrics", at a dinner meeting of the Morrow County Medical Society, Tuesday, November 8, at Mt. Gilead.—T. Caris, M.D., secretary.

COMING MEETINGS

Ohio State Medical Association, Toledo, May 3-4, 1939.

American Medical Association, St. Louis, May 15-19, 1939.

American College of Physicians, New Orleans, March 27-31, 1939.

American Congress of Obstetrics and Gynecology, Cleveland, Sept. 11-15, 1939.

American Student Health Association, New York, Dec. 29-30.

Radiological Society of North America, Pittsburgh, Nov. 28-Dec. 2.

Society for the Study of Asthma and Allied Conditions, New York, Dec. 3.

Southern Surgical Association, White Sulphur Springs, W. Va., Dec. 6-8.

Western Surgical Association, Omaha, Dec. 2-3.

Union District Society Meeting

Dr. H. H. Moore, Oxford, was elected president of the Union District Medical Association, at its one hundred and forty-first semi-annual meeting held at the Hamilton Y.W.C.A., Thursday, October 27. Other officers elected were: Dr. Mildred White Gardiner, Middletown, vice-president, and Dr. Paul W. Blossom, Richmond, Indiana, secretary and treasurer. The spring meeting of the association will be held in Eaton, Indiana, April 27.

The following program was presented: "As Laymen See Us", by Dr. E. T. Storer, Middletown; "Abnormal Renal Mobility", by Dr. Parke G. Smith, Cincinnati; "Treatment of Stomach and Duodenal Lesions", by Dr. M. M. Zinninger, Cincinnati, and "Certain Aspects of the Control of Syphilis", by Dr. John R. Pate, state director of venereal disease control, Louisville, Ky.

Retiring officers are: Dr. Storer, president; Dr. Moore, vice-president, and Dr. L. H. Skimming, Middletown, secretary-treasurer.

Physicians Are Invited to Lectures on Children's Dentistry and Pediatrics

During the month of December the Bureau of Dental Hygiene, State Department of Health, is conducting several refresher courses to which they extend an invitation to the members of the medical profession to attend. The courses covering children's dentistry and pediatrics are as follows:

Dec. 12—Mayflower Hotel, Akron.

2:30 P.M. Dr. E. F. Schroeder, Toledo, "Operative Dentistry for Children".

6:00 P.M. Dinner.

7:15 P.M. D. L. Houser, D.D.S., Chief, Bureau of Dental Hygiene, State Department of Health, "Resumé of the Activities of the Bureau of Dental Hygiene".

8:15 P.M. Dr. Arthur W. Thomas, M.D., Chief, Bureau of Child Hygiene, State Department of Health, "Pediatrics and Pediadontia".

Dec. 15—Secor Hotel, Toledo.

2:00 P.M. C. Wilford Wilson, Detroit, Mich. "Operative Dentistry for Children".

4:30 P.M. Dr. Arthur W. Thomas, M.D. "Pediatrics and Pediadontia".

6:00 P.M. Dinner

7:15 P.M. D. L. Houser, D.D.S., "Resumé of the Activities of the Bureau of Dental Hygiene".

8:00 P.M. Continuation of Dr. Wilson's Address.

Dec. 21—Hamilton, Ohio.

2:00 P.M. Dr. Daniel C. DeArment, Perrysburg, "Operative Dentistry for Children".

4:30 P.M. Dr. Arthur W. Thomas, M.D., "Pediatrics and Pediadontia".

6:00 P.M. Dinner.

7:15 P.M. D. L. Houser, D.D.S., "Resumé of the Activities of the Bureau of Dental Hygiene".

7:45 P.M. Continuation of Dr. DeArment's Address.

The Committee on Professional Ethics of the American Bar Association in a recent opinion holds that a person legally authorized to practice law and medicine may practice the two simultaneously without violating the canons of that association but that he must recognize in every case the particular capacity in which he is acting.

IN MEMORIAM

Benjamin Clyde Barnard, M.D., Alliance; Western Reserve University School of Medicine, Cleveland, 1907; aged 61; member of the Ohio State Medical Association, Fellow of the American Medical Association and Fellow of the American College of Surgeons; died November 4. A past president of the City Hospital Staff, Dr. Barnard had practiced in Alliance for 29 years. During the World War he served overseas as a major in the Medical Corps of the United States Army. Dr. Barnard was a member of the Presbyterian Church, a past president of the Kiwanis Club, and a member of the Masonic Order, the American Legion and the Chamber of Commerce. Surviving are his widow and two daughters.

Bailey Campbell, M.D., Dayton; Medical College of Ohio, Cincinnati, 1896; aged 72; died October 27. Dr. Campbell had been retired for many years. He formerly practiced in Osborn. His widow survives.

Allen M. Chilcote, M.D., Fostoria; University of Wooster, 1875; aged 87; died September 29. Dr. Chillcote practiced in Bloomdale for 35 years. His widow and a son survive.

John Henry Cox, M.D., Lucasville; Eclectic Medical College, Cincinnati, 1889; aged 85; died October 20. Following graduation Dr. Cox practiced in Taylorsville, Highland County, for a short time, later moving to Sedan, a community which he served for 40 years. After his retirement from the practice of medicine, he was a teacher in the Mt. Summit school for five years. He was an active member of the Christian Church. His widow, five sons, two daughters, and a sister survive.

Alonzo B. Garrett, M.D., Gallipolis; Eclectic Medical College, Cincinnati, 1870; aged 91; died November 1. Dr. Garrett was surgeon general of the Grand Army of the Republic, and the last surviving Union veteran in Gallipolis, where he had been located for 30 years. A native of West Virginia, he enlisted as a drummer boy in the Union Army at the age of 14. Following the war, he taught school and later studied medicine. Dr. Garrett represented the Sixth District in the West Virginia State Senate for several years; served as U. S. Consul at Nuevo Laredo, Mexico, for 15 years, and retired from the consular service in 1923, after seven years in a consular post in Canada. The oldest member of the Knights of Pythias in Ohio, Dr. Garrett was an honorary member of the Spanish-American War Veterans, the American Legion, J.O.U.A.M., the Loyal Order of Moose, Knights of the Golden Eagles and the Methodist Church. His widow survives.

Fisher Franklin DeMuth, M.D., Cecil; Eclectic Medical College, Cincinnati, 1882; aged 82; former member of the Ohio State Medical Association and the American Medical Association; died October 16. Dr. DeMuth practiced medicine for more than 50 years, having begun in Waterville in 1882. He practiced there for one year and at Waterville for four years. In 1886 he moved to Cecil where he practiced until his retirement in 1937. Dr. DeMuth was a past president of the Paulding County Medical Society. He represented Paulding County in the Ohio General Assembly from 1902 to 1906. He was a member of the Knights of Pythias, Masonic Order and the Red Men. Surviving are his widow, three sons, including Dr. George W. DeMuth, Sherwood, and Dr. Seth E. DeMuth, Hicksville, a brother, a sister, and a grandson, Dr. F. F. DeMuth, Hicksville.

John Bernhard Egts, M.D., Delphos; Cleveland University of Medicine and Surgery, Homeopathic, 1885; aged 87; died November 5. A native of Germany, Dr. Egts practiced in Cleveland two years, locating in Delphos in 1887, where he practiced until his death. Dr. Egts was a former city health commissioner. He was an elder in the Presbyterian Church. Two daughters, two sons and a sister survive.

William James Fletcher, M.D., Eureka; Miami Medical College, Cincinnati, 1880; aged 81; former member of the Ohio State Medical Association and the American Medical Association; died November 9. A native and life-long resident of Eureka, he served that Gallia County community for 40 years, having retired 15 years. His daughter and a sister survive.

Franklin A. Heckler, M.D., Columbus; Ohio Medical University, Columbus, 1895; aged 71; former member of the Ohio State Medical Association and the American Medical Association; died October 17. Dr. Heckler retired in 1937, after having practiced in Columbus for 42 years. He was a member of the Masonic Order. A sister survives.

Inez Hyatt, M.D., Conneaut; Ohio State University College of Homeopathic Medicine, 1915; aged 68; died October 15. Dr. Hyatt practiced in Cleveland for eight years and in Conneaut for 15 years. She was city health commissioner there for several years. A brother survives.

John Huntington Lewis, M.D., Cincinnati, Cincinnati College of Medicine and Surgery, 1896; aged 73; died November 7. Dr. Lewis practiced in Cincinnati for 32 years. He was the last sur-

viving charter member of the local chapter of Red Men. His widow survives.

William Scott McKell, M.D., Chillicothe; University of Colorado School of Medicine, Denver, 1913; aged 55; member of the Ohio State Medical Association and Fellow of the American Medical Association; died October 19. Although he never practiced medicine, Dr. McKell was always an active member of the Ross County Medical Society. He had extensive business interests, including the presidency of the Chillicothe Telephone Company and the Portsmouth Clay Products Company. Dr. McKell was the donor of the site for the McKell High School at Fullerton, Ky., and also donated the site for a new school to be erected at South Portsmouth. His widow survives.

Louis Otto Saur, M.D., Fosters; Medical College of Ohio, Cincinnati, 1897; aged 63; died October 30. Dr. Saur practiced in Norwood and Cincinnati for nearly 40 years. During the World War he was a major in the Medical Corps of the United States Army. For nine years Dr. Saur was health commissioner of Norwood. He had been in private practice in Fosters, Warren County, for the past few years. Dr. Saur was a member of the Masonic Order, the J.O.U.A.M., and the D. of A. His widow survives.

Alva Earl Snyder, M.D., Bryan; Jefferson Medical College of Philadelphia, 1894; aged 69; member of the Ohio State Medical Association and Fellow of the American Medical Association; died October 20. Dr. Snyder practiced in Bryan for 44 years. From 1900 to 1909 he was a surgeon in the Ohio National Guard, and during the World War served overseas as a captain in the Medical Corps of the U. S. Army. He was a member of the Masonic Order. Surviving are his widow and two sons.

Roy Gillelan Werner, M.D., Akron; Johns Hopkins University School of Medicine, 1915; aged 56; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 12. Dr. Werner had been a member of the Summit County Medical Society since March 1, 1921, and was president-elect of the society in 1933 and president in 1934. He was a member of the staffs of Akron City and St. Thomas Hospitals. From 1918 to 1919 he was a lieutenant in the Medical Corps of the U. S. Army. Dr. Werner was a member of the Phi Chi fraternity. His widow, his mother and a brother survive.

John Joseph Winn, M.D., Norwood; Medical College of Ohio, Cincinnati, 1885; aged 80; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 4. Dr. Winn practiced in Norwood and vicinity for over 40 years, and was active in the life of the community. He was a member of the Eagles Lodge, the Knights of Columbus, the Knights of Ohio and St. Elizabeth's Catholic Church, of which he was a charter member and organizer. His widow and a sister survive.

Successful Meeting Held By the Eighth District at Granville

Approximately 100 physicans from the Eighth District of the Ohio State Medical Association attended the annual Fall Meeting of the district at the Granville Inn, Thursday, October 27. The program consisted of a golf tournament in the morning; scientific sessions in the afternoon and evening and a bridge luncheon for physicians' wives in the afternoon.

The afternoon scientific session was presented by two members of the faculty of the University of Michigan Medical School, Dr. Norman R. Kretzschmar, associate professor of obstetrics and gynecology; and Dr. Fred J. Hodges, professor of roentgenology. Dr. Kretzschmar spoke on "Surgical Treatment of Pelvic Abscess and Cellulitis" and "Endocrinology in Gynecological Practice". Dr. Hodges discussed "The X-ray Diagnosis of Gastro-Intestinal Disease".

Following dinner, Dr. Barney J. Hein, Toledo, President of the Ohio State Medical Association, spoke on some of the economic problems confronting the medical profession and Dr. H. A. DeWeerd, associate professor of history, Denison University, discussed "Recent Trends in International Affairs".

Other entertainment included music during the dinner by the Sam Gelfer Trio; vocal selections by the Denison University Girls' Glee Club Octette and a dance specialty by Jean Burke.

The concluding address was made by Dr. George H. Gardner, assistant professor of gynecology, Northwestern University Medical School, Chicago, on "Frequently Encountered Lesions of the Cervix Uteri—Differential Diagnosis and Treatment".

An attractive 20-page bulletin published by the Licking County Medical Society was given to all physicians who attended the meeting.

Guests included Dr. C. C. Sherburne, Columbus, Councilor for the Tenth District; Dr. Jonathan Forman, Editor of *The Ohio State Medical Journal;* Charles S. Nelson, Executive Secretary, and George H. Saville, Assistant Executive Secretary of the Ohio State Medical Association.

Credit for a highly successful meeting goes to the officers of the Eighth District Society: Dr. George A. Gressle, Newark, president; Dr. Donald R. Sperry, Newark, secretary, and Dr. Edmund R. Brush, Zanesville, Councilor.

Good Program Presented at Meeting of Ninth District at Ironton

The annual meeting of the Ninth District of the Ohio State Medical Association was held at the Elks' Club, Ironton, Wednesday, November 16, with over 75 physicians in attendance.

Following luncheon, Dr. Parke G. Smith, Cincinnati, President-Elect of the Ohio State Medical Association, spoke on "The Economic Problems Facing the Profession", and Charles S. Nelson, Columbus, Executive Secretary, discussed some of the activities of the Association.

The scientific program consisted of the following addresses: "The Surgical Treatment of Essential Hypertension", by Dr. George Crile, Cleveland, with discussion by Dr. Dow Allard, Portsmouth; "Functional Heart Tests", by Dr. Harry E. Landt, Cincinnati, with discussion by Dr. Wm. R. Riddell, Jackson; "Allergy in Everyday Practice", by Dr. Jonathan Forman, Columbus, with discussion by Dr. Leo C. Bean, Gallipolis.

It was voted to hold next year's meeting in Jackson, and the following new officers were elected: Dr. Wm. R. Riddell, Jackson, president, and Dr. John L. Frazer, Wellston, secretary.

The program was arranged by the retiring officers, Dr. Wm. F. Marting, president, and Dr. V. V. Smith, secretary, assisted by Dr. Ralph F. Massie, Dr. Thomas E. Miller, Dr. Wm. A. French, Mrs. W. F. Marting, Mrs. W. W. Lynd and Mrs. V. V. Smith, all of Ironton, and the Ninth District Councilor, Dr. I. P. Seiler, Piketon.

Premarital Physical Examination Bill To Be Presented To Legislature

Revision of Ohio marriage and divorce laws by the new General Assembly will be asked in January, Dean H. W. Arant, of the Ohio State University law school and chairman of the Ohio Bar Association commission, appointed by former Governor George White to examine the state marriage and divorce laws, announced recently.

Recommendations of the commission would:

Require proof of physical fitness by both men and women before marriage, including laboratory tests and a physician's statement that parties are free from venereal disease, epilepsy and mental defects.

Abolish the five-day waiting period between application and issuance of marriage licenses.

Abolish common law marriages by requiring all parties to marriage to present a legally issued certificate to establish their property rights in wedlock.

Require persons applying for licenses to remarry to present copies of their divorce decrees.

The proposed law recommends a 15-day limit between the time a physical examination is made and the time the marriage license is issued.

Cincinnati Physicians Present Program at Summit County Postgraduate Day

The Seventh Postgraduate Day of the Summit County Medical Society was held at The Mayflower Hotel, Akron, Wednesday, November 16. The program was presented by three members of the faculty of the University of Cincinnati College of Medicine: Dr. M. A. Blankenhorn, professor of medicine; Dr. John A. Caldwell, professor of clinical surgery, and Dr. M. M. Zinninger, associate professor of surgery. At the afternoon session, the following subjects were discussed: "Surgical Lesions of the Stomach and Duodenum", Dr. Zinninger; "The Serum Treatment of Lobar Pneumonia", Dr. Blankenhorn; and "Fractures of the Humerus", Dr. Caldwell. Addresses at the evening session were: "The Diagnosis and Surgical Treatment of Diseases of the Gall Bladder and Bile Ducts", Dr. Zinninger; "Bacterial Endocarditis—Diagnosis and Treatment", Dr. Blankenhorn; and "Fetish Worship in the Treatment of Fractures", Dr. Caldwell. The meeting was arranged by the officers of the society, Dr. J. G. Lemmon, president, and Dr. A. S. McCormick, secretary; and the Committee on Postgraduate Study, Dr. A. E. Davis, chairman, Dr. H. V. Sharp, Dr. P. C. Doran, Dr. W. J. Pittenger and Dr. F. T. Moore.

Dr. R. A. Willett Honored

Dr. R. A. Willett, Elmore, was guest of honor at a dinner given by his colleagues in the Ottawa County Medical Society in recognition of the 50th anniversary of his entrance into the practice of medicine. The society presented Dr. Willett with an engraved plaque. The entire 50 years of Dr. Willett's medical career have been served in Elmore and vicinity, where his father, Dr. Peter Willett, practiced for many years, and his son, Dr. Gaillard P. Willett, now practices. In addition to being a veteran member of the Ottawa County Medical Society, Dr. Willett has been president of the County Board of Health since its organization many years ago, and is president of the Board of Education, mayor of Elmore, and vice-president of the Bank of Elmore Company.

Open New Offices

Among physicians who have recently opened new offices in Ohio are the following: Dr. Leonard Hautzenroeder, Mansfield; Dr. John Hendricks, Newark; Dr. John F. Hauss, Celina; Dr. Randolph A. Blackman, Cardington; Dr. H. L. Spiro, Sunbury; Dr. D. John Reibel, Ashland; Dr. J. A. DeBold, Wilmington; Dr. William B. Faircloth, Zanesville; Dr. J. W. Arnold, Ashland; Dr. Gaylord J. Nixon, Mt. Gilead; Dr. H. C. Johnson, Mt. Vernon.

BUCKEYE NEWS NOTES

Alliance—Dr. George L. King addressed a recent meeting of the Atwater Parent-Teachers' Associaton on "Prevention of Diseases of the Eye in Children".

Ashland—"Relationship of Health to Success in Life", was the subject of an address recently made by Dr. Paul E. Kellogg at the Junior-Senior Forum of Ashland College.

Ashtabula—Dr. Harry A. Tagett is the new president of the Kiwanis Club, and Dr. Noble F. Crandall is a new member of the Board of Directors.

Canton—Dr. Edward S. Folk will become mayor on January 1, 1939, succeeding James Seccombe, who was elected to the U. S. Congress. President of the local council, Dr. Folk has also served on the board of education and the board of health.

Carey—A talk on "Cancer" was made by Dr. Frederick C. Smith, Marion, at a recent meeting of the Kiwanis Club. Dr. Smith will represent the Eighth District in Congress, 1939-1940.

Chardon—At a recent meeting of the Chagrin Falls Woman's Club, Dr. Lucy Stone Hertzog spoke on "The Truth About Socialized Medicine and Kindred Matters."

Chillicothe—Dr. Ralph W. Holmes described how much medical skill has accomplished in the conquering of disease at the opening meeting of the Sunset Club.

Cincinnati—Dr. Parke G. Smith, President-Elect of the Ohio State Medical Association, addressed a recent meeting of the Dayton Federation of Women's Clubs on "Medical Service and the Financing of Medical Care".

Cleveland—Dr. J. L. Bubis was guest speaker at a meeting of the Obstetrical and Gynecological Section of the Buffalo Academy of Medicine October 19. His subject was "The Relationship of Puerperal Gynecology to Modern Obstetrics".

Columbus—Dr. H. C. A. Beach has been named Keeper of the Inner Gate of the Ben Hur Life Association.

Dayton—A talk on syphilis and its treatment was made by Dr. H. H. Williams at a recent meeting of the Junior Chamber of Commerce.

Findlay—Dr. Francis C. Clifford, Toledo, was guest speaker at the annual Ladies' Night of the Kiwanis Club. The program was arranged by Dr. O. P. Klotz.

Kenton—Dr. R. G. Schutte and Dr. N. C. Schroeder were guests of honor at a recent meeting of the Chamber of Commerce, in recognition of their election to the American College of Surgeons. Dr. Harry S. Noble, St. Marys, was the speaker.

Mansfield—Dr. L. D. Bonar is the new president of the local chapter of the National Aeronautics Association.

Massillon—Dr. J. A. Carnes told of his recent trip to Europe at a meeting of the local post of the American Legion.

Middletown—"Combating Social Diseases" was the subject of a talk made by Dr. J. C. Stratton at a recent meeting of the local Ministerial Association. Dr. Stratton is president of the City Board of Education.

Mt. Gilead—Dr. F. E. Mahla, assistant state director of health, was guest speaker at a recent meeting of the Kiwanis Club.

New Philadelphia—Dr. C. J. Miller spoke on "The Value of X-ray in the Practice of Medicine", at a meeting of the Massillon Kiwanis Club.

Norwalk—Dr. R. P. Scott, Jr., has been named to fill the unexpired term of Dr. B. C. Pilkey as Huron County health commissioner. Dr. Pilkey, who held the post for 18 years, resigned because of ill health.

Sandusky—A trap shoot was one of the features of the clambake held by the Erie County Professional Men's Club held at Cedar Point recently.

Springfield—The defects in a system of socialized medicine were pointed out by Dr. D. W. Hogue at a recent meeting of the Kiwanis Club.

Wapakoneta—"Marijuana" was the subject of a talk made by Dr. Alfred W. Veit before the Mother's Club recently.

Warren—The 1938-1939 Community Forum was opened by Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, in an address on "Socialization of the Practice of Medicine".

Wauseon—Medical economics and activities of the Ohio State Medical Association were discussed by Dr. Barney J. Hein, Toledo, President of the Association, and Dr. Fred M. Douglass, Toledo, member of the Association's Special Coordinating Committee, at a meeting of the Detwiler Memorial hospital staff, November 4.

Wellsville—Dr. E. G. Kuhlman spoke on "Cancer" at a recent meeting of the Twentieth Century Club.

Xenia—Dr. Reyburn McClellan, president of the Greene County Medical Society, addressed a recent forum meeting at the Presbyterian Church on "Health".

THE PHYSICIAN'S BOOKSHELF

Maternal Care Complications. By Drs. R. D. Mussey, P. F. Williams, and F. H. Falls, edited by Fred L. Adair, M.D.. Cloth $1.00; Paper $0.50. University of Chicago Press. 1938; pp. 95.

This small book of less than a hundred pages, edited by Dr. Fred Adair, was written by three authors, each discussing one of the three major causes of maternal mortality: Toxemias, Hemorrhage, and Infection. It is well written, brief, practical, very little that is controversial, and its contents should be known by every doctor practicing any obstetrics.

Of hyperemesis the author writes that in cases in which treatment is begun early and properly carried out, a therapeutic abortion is seldom necessary. Of eclampsia he writes: Caesarean section is contraindicated in the presence of convulsive toxemia, except where there are other strict indications such as a contracted pelvis, and then only after the acute stage is controlled. Puerperal infection is almost completely preventable in properly conducted obstetric cases. All studies indicate that expectant treatment of placenta previa was the most common fault in the management of fatal cases.—F. C. Hugenberger, M. D.

Doctor Rogers' Ordeal. By Homer Avera. $2.50. John H. Hopkins, Inc., New York, 1938; pp. 370.

It is a story of the old South with the leading character a physician who has been infected in his youth by syphilis. The story carries us through the Civil War. It is a well told tale of the South from 1837 to 1867, with the modern touch of the social evil and from the viewpoint of a physician.

How to Get Married and Stay That Way. By Frederick B. Fisher. $1.00. Rayart Publishing Company, Detroit, Mich., 1938; pp. 109.

This book has grown out of the author's experience in conducting a public seminar covering seven weeks of discussion. It is a well balanced, modern presentation of the social problem, leaving the clinical discussion of sex to others.

Quelques Vèritès Premières (Ou Soi-Disont Telles) en Pathologie Cardio-Vasculaire. By E. Donzelot. 24 Francs. Masson & Cie-Paris. 1937; pp. 80.

This very attractively bound and printed collection of cardiac fundamentals resembles a book of poems more than a medical monograph. It is the ninth of a proposed collection of twelve volumes dealing with most of the specialties. The French is not difficult as is evident in the description given for the respiratory arrhythmia of the pulse. "L'Arythmie respiratoire, caractèrisèe par des phases successives d'accèlèration du pouls correspondant à l'inspiration et de ralentissement coincident avec l'expiration, n'a pas de valeur pathologique." Like most French books it contains no bibliography, but this defect is made up for by the fact that it contains more solid information about cardiac physiology, pathology and disease than any volume of twice its size known to the reviewer.—Robert C. Kirk, M.D.

Receptionist. By Eliot Brewster. $2.00. Phoenix Press, New York, 1937; pp. 253.

An interesting story of a dentist's assistant. All life moves through the office as in yours and mine!

The Romance of Proctology. By Charles Elton Blanchard, M.D., Youngstown, Ohio. $4.50. Success Press, Youngstown, Ohio, 1938; pp. 284.

Dr. Blanchard tells the story of the history and development of this much neglected branch of surgery from the earliest times to the present day. This is most interestingly done. The author has gone on in his unorthodox way throughout the years to practice ambulant proctology as he thought best. In this book he gives the biographies of those from whom he got ideas.

A Prairie Doctor of the Eighties. By Francis A. Long, M.D., editor of the Nebraska State Medical Journal, with two chapters on "The Prairie Doctor's Wife", by Mrs. Long. $2.75. Huse Publishing Company, Norfolk, Nebraska, 1937; pp. 223.

Here is given the autobiography of a distinguished physician and medical editor who began his practice in Madison, Nebraska, in June, 1882. In addition to being a mighty interesting narrative, it is a definite contribution to the medical and social history of the last 60 years in the far Middle West.

The Life of Chevalier Jackson. An autobiography. $3.50. The Macmillan Company, New York, 1938; pp. 229.

The story of his early life explains the man. Born in the rough mining country near Pittsburg, the days spent in country school are a record of intolerable cruelty. These experiences and the privations he was obliged to undergo while getting his education and in his early days of practice made him the man he was—mechanic, artist, propagandist. There is much that will interest the medical readers in this biography, but its real

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OPHTHALMOLOGY—Two Weeks Intensive Course starting April 24, 1939. Informal Course starting every week.

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appeal is wider than that. It possesses unusual fascination to all who are interested in personalities and their goals.

Diseases of the Thyroid, Parathyroid, and Thymus. By Andre Crotti, M.D., F.A.C.S., LL.D., R.I.C.S Third Edition. $20.00. Lea and Febiger, Philadelphia, 1938; pp. 1,129, with 262 illustrations and 39 plates in color.

This volume, completely revised and presented in its new dress continues to be the primer de luxe medical book of our time. Its contents will continue to appeal to the physician, the internist, the surgeon, the endocrinologist, the pathologist, and to the research worker. It is an intensely personal monograph reflecting accurately the individuality of its author. It is my opinion that we need more books like this one which sets forth exactly what the author knows and believes, rather than an attempted impartial recitation of what has been said before. This book is a review of the busy life of Andre Crotti—his surgical technique acquired in doing over 9,000 thyroidectomies; his diagnostic acumen gained in the study of 27,000 goitre patients; his 23 years of tireless research into the cause of goitre. We in Ohio are proud of this book and its author!

Sex Satisfaction and Happy Marriage. By the Reverend Alfred Henry Tyrer, clergyman of the Protestant Episcopal Church. New Edition, $2.00. Emerson Books, Inc., New York, 1938; pp. 160.

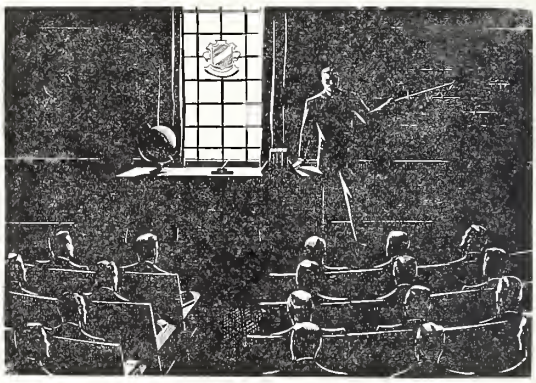
Since its publication in 1936, this volume has been well received and this edition is especially deserving of it. In the day's work of a physician there is a definite place for this book. It is the one to recommend to those people who have been raised in churchly homes where all sex impulses or manifestations are looked at askance.

Workbook in Elementary Diagnosis for Teaching Clinical History Recording and Physical Diagnosis. By Logan Clendening, M. D., professor of clinical medicine, University of Kansas. $1.50. The C. V. Mosby Company, St. Louis, 1938; pp. 167.

This is a work book for the medical student carrying over for him methods used in his laboratory studies. Dr. Clendening brings all of his skill in writing in a practical approach to the subject. Tables, charts, graphs, and drawings all are used to supply that which in most texts is bewildering, long-winded discussion.

Immune-Blood Therapy of Tuberculosis. With Special Reference to Latent and Masked Tuberculosis. By Joseph Hollis, M.D. Printed privately, 1938; pp. 198.

The author here summarizes his observations in the field of specific therapy of tuberculosis covering a period of 30 years. These observations are marshalled to support the thesis that tuberculosis may be masked as neurasthenia, rheumatism, thyroidosis, epilepsy, etc., and that



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Madmen Die Alone. By Josiah E. Graves. $2.00. Wm. Morrow and Company, New York, 1938; pp. 280.

Josiah Greene, a newcomer to the Morrow mystery list, makes a good entrance with this mystery tale full of humor as the reader tries to decide whether the murder of the brilliant young psychiatrist, Dr. Sylvester, was a madman's crime or his own, or had he been purposely turned loose by someone, or just what did happen?

Outline of Roentgen Diagnosis, An Orientation in the Basic Principles of Diagnosis by the Roentgen Method. By Leo A. Rigler, B.S., M.D., M.S., professor of radiology, University of Minnesota, Minneapolis, Minnesota. Student's edition. J. B. Lippincott Company, Philadelphia, 1938; pp. 212.

While this is intended as a text outline for medical students, the average physician will find it is a better work of reference than the more elaborate works. The text has been depleted to a basic outline and consequently is much more helpful than most of the over-stuffed monographs with which the customs of the times compel the average radiologist to inflict upon us.

Plan for Marriage. An Intelligent Approach to Marriage and Parenthood Proposed by Members of the Staff of Vassar College. Joseph Kirk Folsom, editor. $3.00. Harper & Brothers, New York, 1938; pp. 306.

This book consists of a large part of the material presented in the lectures last year at Vassar College and covers 12 major problems by seven authorities. It is presented in the terms and with the viewpoint of youth. It seems to your reviewer that this should be an engagement present to every young couple who begin the plans for their marriage. It would be even better if every person were to read it on his or her eighteenth birthday.

Cancer: With Special Reference to Cancer of the Breast. By R. J. Behan, M.D., Dr. Med. (Berlin), F.A.C.S., cofounder and former director of the Cancer Department of the Pittsburgh Skin and Cancer Foundation, Pittsburgh. Price $10.00. The C. V. Mosby Company, St. Louis, 1938; pp. 844, with 168 illustrations.

In this large volume "written primarily for the clinician who is seeking to enlarge his knowledge of the cancer problem", the author has accomplished his purposes. He presents an exhaustive digest of the literature concerned with facts and theories as related to etiology, diagnosis and treatment of cancer. Many of the tests and theories, some of which are not generally accepted are critically evaluated. His attempt to stimulate new ideas and to lighten the burden of the practitioner of medicine in the understanding of cancer and its treatment represents painstaking effort and should be well received. This book will appeal to surgeons, radiation therapists and others whose reading has not been sufficiently extensive to assimilate the background of detailed research and speculation contributing to the actual advances made in the struggle against cancer. The extensive bibliography of this volume recommends it as a valuable addition to every medical library, including hospital bookshelves for the use of interns. This publication should stand on its merit, its outstanding points being its exhaustive character, its broad viewpoint and unbiased presentation.

The conclusions with regard to the heredity of cancer and the results of early diagnosis and cancer and the results of early diagnosis and treatment should be of aid to the Women's Field Army Against Cancer, if widely disseminated. The chapter on Associated Constitutional Treatment, particularly that of chemotherapy, is conservative but well-balanced and should be read by all physicians who have cancer patients. In general, the section on irradiation treatment may be criticized in that parts of it are too technical for the clinician not limited to cancer therapy, and inadequate and not sufficiently comprehensive for the radiation therapist.—George P. Sims, M.D.

Applied Anatomy, Functional and Topographical. By Robert H. Miller, Associate Professor of Anatomy in the University of Tennessee, Memphis. $6.50. Lea and Febiger, Philadelphia, 1938; pp. 484.

The author has succeeded in his attempt to correlate the facts observed in the laboratory with the dynamics and function of the living body. He has clothed the skeleton with living parts and set it in motion. Just the book with which to review your anatomy.

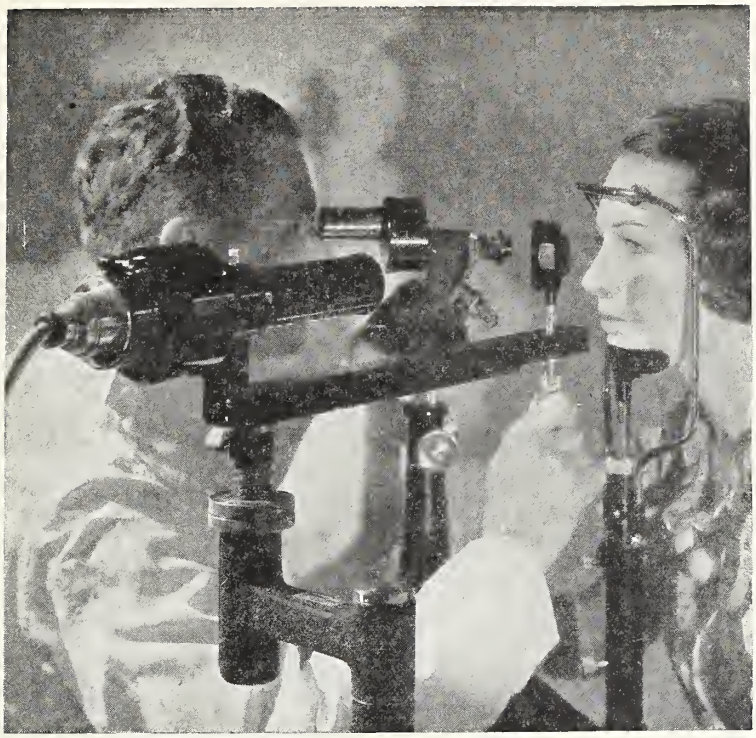
I Swear by Apollo. A Life of Medical Adventure. By William E. Aughinbaugh, M.D. $3.00. Farrar and Rinehart, Inc., New York, 1938; pp. 438.

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hard to evaluate certain of these stories in this book. Every page, however, is lively and full of interest. For the better part of 40 years, the author has practiced medicine throughout the world. He frankly was seeking adventure. His story is good reading in which every physician will get double pleasure.

The Sex Criminal. By Bertram Pollens, psychologist to Rikers Island Penitentiary in New York City. $2.00. The Macaulay Company, New York, 1938; pp. 211.

This is an excellent attempt to present the problem which these people place before society. He urges private trials, condemns sterilization, and the censorship of salacious literature as futile. These persons are to be segregated by placing them in a special institution which is neither penal or correctional. The author outlines what parents and society can do to prevent their development. He also correctly separates the accidental crime when a normal person runs afoul of our laws. A worthwhile book.

Diseases of the Skin for Practitioners and Students. By George Clinton Andrews, M.D., associate professor of dermatology in Columbia University. Second Edition, entirely reset. $10.00. W. B. Saunders Company, Philadelphia, 1938; pp. 899.

This edition gives an evaluation of the advancements made in dermatology in the last eight years and weaves them into a practical text on skin diseases. Over 75 new diseases have been added together with new chapters on dermatoses due to filterable viruses, vitamin deficiencies, and cutaneous infiltrations with the products of metabolism. It is highly recommended as the up-to-date volume on the subject.

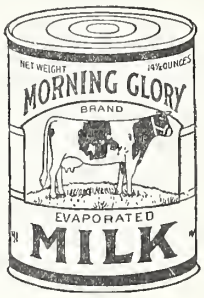
A Textbook of Gynecology. By Arthur Hale Curtis, M.D., professor and chairman of the department of obstetrics and gynecology, Northwestern Medical School, Third Edition, reset, $17.00. W. B. Saunders Company, Philadelphia, 1938; pp. 603.

In the eight chapters preliminary to the entirely rewritten subject matter, which comprises the bulk of the preceding edition, much new material on anatomy, physiology and endocrinology is set forth. The book is a complete, concise survey of the subject done with painstaking thoroughness and in an independent manner. It is highly recommended.

Canton—Dr. Charles O. Paradis is taking a postgraduate course in otolaryngology at Rush Medical College, Chicago.

Cleveland—Dr. Robert A. Cooke of the Department of Allergy, Roosevelt Hospital, New York City, spoke on "Diagnosis and Management of Allergy in General Practice", at a meeting of the Cleveland Allergy Society, Tuesday, November 1.

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IV. Some Accomplishments of Vitamin D Research

● By 1932, many of the basic facts concerning Vitamin D had been clearly established (1). At that time, the International system of denoting vitamin D unitage had not been universally adopted. However, the antirachitic potencies of a wide variety of biological materials had already been explored; the need for standardization of assay methods was appreciated; the minimum requirement of infants and children for vitamin D had been estimated; and the probable "multiple" nature of the vitamin definitely indicated.

Since 1932, the importance of vitamin D in human nutrition and the challenge of the many unanswered questions regarding this factor have served to stimulate research both in the clinic and in the laboratory. It is of interest to note some of the outstanding advances made in our knowledge of vitamin D which the past six years have brought.

It is now known that at least ten different sterol derivatives are capable of exhibiting the physiologic properties of vitamin D. Of these, only two may be considered of prime importance as far as practical application in human nutrition is concerned, namely, the activation products of ergosterol and 7-dehydro-cholesterol. The remaining forms are of considerable theoretical importance in that their identification has completely established the multiple nature of vitamin D (2).

Further research has also defined more closely not only the vitamin D requirements of normal infants and children, but also of premature infants and those peculiarly susceptible to rickets. Apart from conditions of pregnancy and lactation, the possible requirement of the human adult for vitamin D is still not known (3). The International system of expressing vitamin D potency has been universally adopted; bioassay methods have been standardized (4); and last but not least, a high degree of standardization has been attained, not only in regard to the antirachitic potency of Vitamin D preparations, but also as to the extent to which the vitamin D contents of certain foods should be increased by the various means available (3).

While some foods, including some canned foods of marine origin, are valuable food sources of vitamin D (5), no combination of common foods—as they occur naturally—can supply the demands of the infant and child for the antirachitic factor. Although there is no reason as yet to believe that the normal adult requirement for vitamin D is not largely fulfilled by a varied diet of protective foods, it is definitely known that the infant and child dietaries must be supplemented with or fortified by vitamin D.

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(1) 1932. J. Amer. Med. Assn. 99, 215 and 301.
(2) J. Amer. Med. Assn. 110, 2150.
(3) Ibid. 110, 703 and 1179.
(4) 1936. U. S. Pharmacopeia, XI Decennial Revision.
(5) 1935. J. Home Econ. 27, 658.
1933. Science 78, 368.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the forty-third in a series, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

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Physical Therapy Motion Picture Films Prepared by A.M.A. Available

The Council on Physical Therapy of the American Medical Association has prepared a number of motion pictures dealing with the value of simple measures, such as heat, light, massage and therapeutic exercise, including underwater movements, in order to stress the importance of physical therapy as an adjunct to the practice of medicine.

In offering to lend these films to county medical societies, the Council points out that apparently one reason why physical therapy has not been accorded more widespread acceptance on the part of the general practitioner is its close association, in his mind, with "machine therapy". While the Council believes that the machine is a useful adjunct to the practice of medicine, it is of the opinion that at least 90 per cent of the good accomplished by physical therapy results from the use of simple measures.

New films available are: "Aids in Muscle Training"; "Occupational Therapy"; "Underwater Exercises"; "Massage"; and "Contraction of Arteries and Arteriovenous Anastomoses".

The following films produced a few years ago also are available: "Effects of Heat and Cold on Circulation of Blood"; "Effects of Massage on Circulation of the Blood"; "Therapeutic Exercises for the Shoulder Joint Following Dislocation", and "Treatment of Compression Fracture of the First Lumbar Vertebra".

These films may be procured by writing to the Director of Exhibits, American Medical Association, 535 Dearborn St., Chicago, Ill.

State Hospital Physicians Request Additional Medical Personnel

Problems confronting physicians on the staffs of state hospitals and new methods of treating mental diseases were discussed at a meeting of the Association of Physicians of Ohio State Institutions held in Columbus, October 6 and 7. Speakers included Dr. J. F. Bateman, Columbus, commissioner of the newly-created division of mental diseases; Dr. H. R. Campbell, Dayton; Dr. Mary Wiltberger, and Dr. N. W. Kaiser, Toledo; Dr. J. W. McGough and Dr. P. A. Ferrara, Cleveland; Dr. N. O. Rothermich, Columbus; Dr. R. B. Hoover and Dr. A. T. Hopwood, Orient, and Dr. B. Caplan, Toledo.

In a business session, a resolution was adopted asking for salary increases and for additional medical personnel on state hospital staffs. It was pointed out that at present there are about 400 patients for each physician.

The following new officers were elected: Dr. Guy H. Williams, Jr., Hawthornden State Hospital, Cleveland, president; Dr. Ewing H. Crawfis, Lima State Hospital, vice-president, and Dr.

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M. P. Smith, Toledo State Hospital, secretary-treasurer. The association will meet next year at Toledo State Hospital.

Announcement was made of the annual one-month course in psychiatry and allied branches of medicine to be presented soon for physicians in state institutions by the Ohio State University College of Medicine in cooperation with the staff of the Columbus State Hospital.

Special Board Examinations

American Board of Anesthesiology: An affiliate of the American Board of Surgery. Written examination, April 8 in various cities. Oral examination, St. Louis, May 13-14. Sec., Dr. Paul M. Wood, 745 Fifth Avenue, New York.

American Board of Dermatology and Syphilology: Sec., Dr. C. Guy Lane, 416 Marlboro St., Boston.

American Board of Internal Medicine: Written examinations will be held in various parts of the United States, Feb. 20. Application for the examination must be received on or before Jan. 1. Sec., Dr. William S. Middleton, 1301 University Ave., Madison, Wis.

American Board of Obstetrics and Gynecology: Written examination and review of case histories of Group B applicants will be held in various cities of the United States and Canada, Feb. 4. General examination for all candidates (Groups A and B) will be given in St. Louis, May 15-16. Applications must be filed not later than sixty days prior to date of examination. Sec., Dr. Paul Titus, 1015 Highland Bldg., Pittsburgh (6).

American Board of Ophthalmology: St. Louis, May 15. Applications must be filed before Feb. 15. Sec., Dr. John Green, 3720 Washington Blvd., St. Louis, Mo.

American Board of Orthopaedic Surgery: Memphis, Tenn., January. Applications for this examination must have been filed with the secretary on or before Oct. 15. Sec., Dr. Fremont A. Chandler, 6 N. Michigan Ave., Chicago.

American Board of Otolaryngology: Sec., Dr. W. P. Wherry, 1500 Medical Arts Bldg., Omaha.

American Board of Pediatrics: Sec., Dr. C. A. Aldrich, 723 Elm St., Winnetka, Ill.

American Board of Psychiatry and Neurology: New York, Dec. 28-30. Sec., Dr. Walter Freeman, 1028 Connecticut Ave. N.W., Washington, D. C.

American Board of Radiology: St. Louis, May 11-14. Sec., Dr. Byrl R. Kirklin, 102-110 Second Ave., S.W., Rochester, Minn.

American Board of Urology: New York, Jan. 13-15. Sec., Dr. Gilbert J. Thomas, 1009 Nicollet Ave., Minneapolis.

National Board of Medical Examiners: Parts I and II. Medical centers having five or more candidates desiring to take the examination, Feb. 13-15. Ex. Sec., Everett S. Elwood, 225 S. 15th St., Philadelphia.

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Results of these studies, conducted by a number of cooperating agencies having responsibility for the solution of the problem of developing some means of reducing or correcting the evils of drug addiction, were made known by the United States Public Health Service (Public Health Report, Supplement No. 138).

Dr. William Charles White is chairman of the Committee on Drug Addiction, Division of Medical Sciences, of the National Research Council, under whose auspices the studies were directed with funds provided by the Rockefeller Foundation.

Pan-Pacific Surgical Congress

The Third Congress of the Pan-Pacific Surgical Association will be held in Honolulu, Hawaii, September 15-28, 1939. An invitation has been extended to surgeons of the United States to meet with outstanding men from Australia, New Zealand, China, Japan, Java and Canada. Information concerning the meeting can be obtained by addressing Dr. George W. Swift, 902 Boren Avenue, Seattle, Wash., past-president; Dr. Frederick L. Reichert, Stanford University Hospital, San Francisco, program chairman for the United States; Dr. Howard Updegraff, 6777 Hollywood Blvd., Los Angeles, program vice-chairman, or Dr. Forrest J. Pinkerton, secretary-treasurer of the Association, Young Building, Honolulu, Hawaii.

Chillicothe—"Socialized Medicine" was the subject discussed by Dr. L. E. Hoyt at the November meeting of Branch 12, Ohio State Nurses' Association.

Findlay—At a recent meeting of the Bethany Girls' classes of the First Lutheran Church, Dr. E. Edwin Rakestraw gave a talk on his trip abroad this summer.

Springfield—Staff officers of City Hospital are: Dr. A. K. Howell, president; Dr. A. Richard Kent, vice-president; Dr. Wm. P. Ultes, secretary and Dr. F. P. Anzinger, treasurer.

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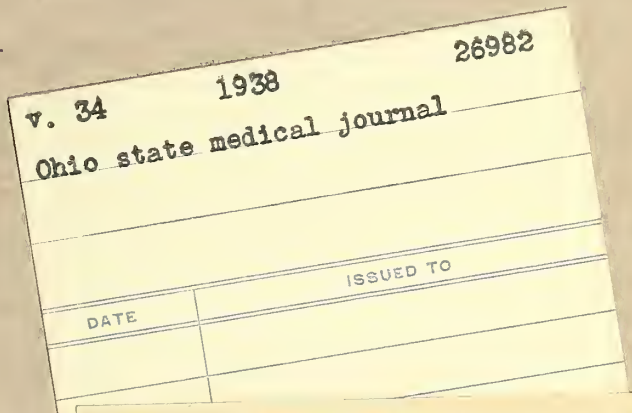
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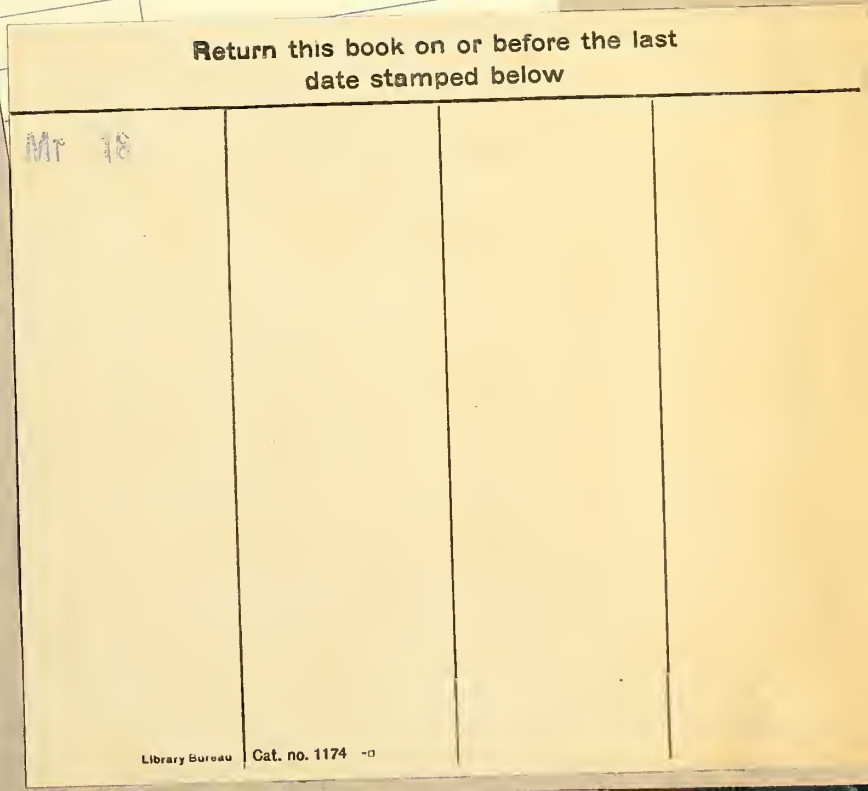
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